DOCUMENT RESUME

ED 352 171 PS 020 963

AUTHOR	Szanton, Eleanor Stokes; And Others
TITLE	Heart Start: The Emotional Foundations of School Readiness.
INSTITUTION	National Center for Clinical Infant Programs, Arlington, VA.
SPONS AGENCY	AT&T Foundation, New York, NY.; Metropolitan Life Foundation.
REPORT NO	ISBN-0-943657-28-8
PUB DATE	92
NOTE	57p.; Foreword by Ernest L. Boyer. Preface by T. Berry Brazelton. Separately printed four-page "Executive Summary" and eight-page "Five Vignettes" bound in. Funding also provided by Johnson and Johnson Consumer Products, Inc. and Pittway Corporate Charitable Foundation.
AVAILABLE FROM	Zero to Three/National Center for Clinical Infant Programs, 2000 14th Street North, Suite 380, Arlington, VA 22201-2500 ($13 plus $4 shipping and handling). 964-965).
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	Child Caregivers; Child Development; *Childhood Needs; Child Rearing; Cognitive Development; Day Care; Emotional Adjustment; *Emotional Development; Environmental Influences; *Health Promotion; Learning Readiness; *Need Gratification; Preschool Education; *School Readiness; Security (Psychology); Self Concept; *Young Children
IDENTIFIERS	*Heart Start; Zero to Three

ABSTRACT

This publication is part of a package of three booklets that synthesize current knowledge about the preconditions for learning in children and discuss ways of fostering these conditions. (The other two booklets are an executive summary of this report and a collection of five vignettes on services for infants, toddlers, and families). This report is based on the premise that children's expectations and attitudes are formed in the first months and years of their lives. Parents need to understand how they can promote in their children certain characteristics that are related to learning in school. These characteristics are: (1) confidence; (2) curiosity; (3) intentionality; (4) self-control; (5) relatedness; (6) capacity to communicate; and (7) cooperativeness. To develop these characteristics, four kinds of needs must be met. First, the need for good physical health is met by providing affordable and accessible health care; tracking children through the health care system; and making child care a health resource. Second, children should be assured of time for unhurried caring from parents and family members, and stability of child care providers over time. Responsive caregiving from parents and child care providers is a third need of all children. Fourth, meeting children's need for safe and supportive environments requires an adequate standard of living for children's families and adequate space in child care settings. In addition to these needs, some children have special needs for themselves and their families that must be met. Recommendations for serving these needs of children are summarized in a chart that describes the responsibility of federal, state, and local governments, and of corporate sources, in serving these needs. Numerous endnotes are included. (SLD)

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HEART START

The Emotional Foundations of School Readiness

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Foreword by
Ernest L. Boyer, Ph.D.

Preface by
T. Berry Brazelton, M.D.

ZERO TO THREE

National Center for Clinical Infant Programs

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- exercising leadership in developing and communicating a national vision of the importance of the first three years of life and of the importance of early intervention and prevention to healthy growth and development;
- developing a broader understanding of how services for infants and toddlers and their families are best provided; and
- promoting training and practices in keeping with that understanding.

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Copyright 1992
ISBN #0-943657-28-8
Library of Congress Catalogue
Card Number: 92-82895

Total Order	Shipping/Handling Fee
Less than $10	$2.50
$10-$59	$4.00
$60 or more	10%
Same day service	$8.00 additional

COST: **$13.00 Heart Start**
$ 6.00 Executive Summary

Design Credit: Melody Sarecky
L. Gar Botzum
Editing Credit: Noelle Beatty
Photo Credits: Faith Bowlus (cover); Barbara Young, M.D. (pp. 2, 23); J. Brown/G. Simon (p. 9); Florence Sharp (p. 16); John Arms (p. 26)

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Foreword by

Ernest L. Boyer
President
The Carnegie Foundation for the Advancement of Teaching

The nation's schools are, in many respects, nothing short of miraculous. They open their doors and serve an unbelievable range of students, against the most impossible odds. Undermined by poverty, violence, political cross-fire and the sharp sting of critics, the schools continue valiantly to carry on their work. In most communities, one can find teachers who are effective, even exemplary, and classrooms where lives are being transformed.

Still, there is another side to the equation. Even in the best of our nation's schools, there are children who do not reach their full potential. The reasons for such failure are complex, but at least one primary problem is quite clear: many children come to school without the essential support they need to learn effectively.

Nearly thirty years ago, policy-makers in this country acknowledged the consequential role that preschool can play in improving children's prospects for school learning. During the decade of the sixties, they created Head Start to give early educational support to children who are most at risk of school failure. As the first graduates of this program proceeded through the grades, it became clear that early intervention truly can make a difference.

Even in preschool, though, children vary greatly in their readiness to learn. Some are more intellectually curious than others. Some read and speak well, while others have difficulty communicating. Some concentrate more readily than others. Some play and interact successfully with their peers, while others prefer to pick fights or remain alone at the fringe of classroom activity.

In the last two decades, our understanding of child development has grown at a dramatic pace. Above all, we now know that later learning depends heavily on what happens to a child in the first few years of life. We realize that infants whose development has been compromised during pregnancy are less likely to succeed in school. We understand, too, that even healthy children who are neglected, abused or subjected to significant instability in their early years can be educationally impaired.

The conclusion is beyond dispute. If we care about children, then we must ensure that every child—from no matter what socioeconomic class, no matter what race, and no matter what family circumstances—has the support he or she needs to become ready to learn.

This brief report is designed to help us reach that important goal. Its purpose is to present, in the clearest language available, a needed synthesis of current knowledge—and it does so admirably. The pages that follow show how the preconditions of learning develop in children and describe how these conditions can be fostered. There is essential information for parents and caregivers and for policy-makers, as well. The messages presented here deserve to be widely read and the policies vigorously pursued.

Preface by

T. Berry Brazelton, M.D.
Children's Hospital Medical Center
Boston, Massachusetts

A child's experiences in the first months and years of life determine whether he or she will enter school eager to learn or not. By school age, family and caregivers have already prepared the child for success or failure. The community has already helped or hindered the family's capacity to nurture the child's development.

In our diagnostic work at Children's Hospital in Boston we can tell by 8 months of age whether a baby expects to succeed or to fail by the way he or she approaches a task. We offer two blocks to a seated 8-month old, and then we demonstrate that we'd like her to place the two blocks together. A baby who expects to succeed, and who is used to the approval and encouragement of adults around her, will pick up one block, mouth it, rub it in her hair, drop it over the side of the table, watching to see whether you will retrieve it for her. When you do, she finally completes the requested task—place the two blocks together. Then she looks up at you with a bright-eyed look of expectancy that says: "Tell me how great I am!"

But a baby who has an untreated learning disability, or who comes from an environment too chaotic or too hopeless to reinforce in him a feeling of success, will demonstrate an expectation to fail. The baby will accept the offered blocks, look dully at them, bring them close together dutifully as directed, but without excitement or enthusiasm. He has demonstrated his cognitive understanding of the task, then he pushes them past each other, apparently failing the task. Then comes the symptom: he looks up at you with the hangdog look that says, "Hit me, I'm no good. See! I've failed!" This child will expect to fail in school. He will expect no encouragement from teachers, and may shrink from encouragement if it is offered. He is likely to find school embarrassing and joyless and may eventually drop out.

This report shows how we can produce many more confident and achieving children, and many fewer who expect to fail—who come almost to welcome failure as a retreat from overwhelming circumstances. It shows how a child's expectations and attitudes are formed in the very first months and years of life, and why encouragement and stimulation are the second most important gifts that parents can provide their children. Love comes first. But parents also need to understand how their actions can help generate the confidence, the curiosity, the pleasure in learning and the understanding of limits that will make their children expect to succeed and help them do so. And policy-makers need to understand and support the social policies that can aid parents in achieving those results.

I am proud that *Heart Start* was begun during my term as President of ZERO TO THREE/ National Center for Clinical Infant Programs. It comes at a crucial time in this country's concern for its children. I believe that parents, professionals and policy-makers will all benefit from it, and so—most of all—will our youngest children.

I. WHAT IS AT STAKE

An American tragedy

Many American children never reach their potential for learning. Some never come close. In former times, such undeveloped potential might have limited the pride that children took in themselves, the satisfactions they experienced in school, the understanding they later brought to everyday problems of life, and the stimulation they eventually offered to their own children. Consequences enough. Yet now there is another even more damaging result: young men and women who do not have the characteristics they need to learn in school are in danger, all their lives, of finding only menial employment, or none.

The reasons are by now familiar. The production of goods is increasingly automated and therefore provides steadily fewer low-skill jobs. Service jobs are growing in number but many require greater verbal facility, higher technical skills, better judgment, or more initiative than traditional blue-collar tasks. Moreover, the pace of technological change now makes much knowledge and most skills obsolete in little more than a decade. So employers seek to hire, even for entry-level jobs, men and women who can readily be trained and later retrained for other jobs. American employers spend more on employee training than the United States spends on all elementary and secondary education, public and private. In high-tech manufacturing employees can expect to spend one-fifth of their work-lives in training. And they are expected to learn. Learning and adaptation are now lifelong challenges. How well people meet those challenges will determine not only how knowledgeably they can participate in the civic life of their communities but also whether or not they advance in their own careers, whether they earn decent incomes, whether they are likely to take pride in their work. It will also affect how well our society competes in a world market.

So an interest in learning, and the capacity to benefit from instruction, are not only important, they are probably more important now, for more people, than ever before in the history of any society. And during the lives of today's children they will become more crucial still. The fact that many of our children never approach their potential for formal learning is thus a triple tragedy—a lifelong tragedy for them, for their families and for our society as a whole. Since many of these children are members of minority groups, the consequences are not only economic; they haunt our politics and offend our sense of justice as well.

An interest in learning, and the capacity to benefit from instruction, are not only important, they are probably more important now, for more people, than ever before in the history of any society.

Schools as much victims as villains

One-quarter of American teenagers don't finish high school. Many who do graduate have simply gone through the motions. They may not even read well: more than one out of eight of high-school juniors are functionally illiterate. The proportion unable to solve simple numerical problems is probably greater. Southwestern Bell Corporation tests applicants for entry-level telephone operator positions for reading comprehension and simple mathematical skills. In St. Louis in 1989, the company culled 15,000 initial applicants in order to find 3,700 who qualified to take the test. Of the 3,700 test-takers, only some 800—fewer than one in four—answered 55 of the 85 questions correctly, and passed.

The frequency of similar stories has produced growing concern about the state of the nation's schools. Education was once the concern only of parents, teachers and local school boards; it has now become an urgent topic for businessmen and politicians as well. The national [federal, state and local] investment in education is growing. In 1991, it exceeded $410 billion. Some

small gains have been achieved, and perhaps most importantly the disparity between minority and nonminority achievement scores has somewhat diminished. But the answer to the ultimate question remains the same: Are the great majority of U.S. students well prepared when they leave school for satisfying and successful lives in a knowledge-based economy? No, they are not.

In part, the problem is still one of resources. Some school systems, especially in areas where the tax base and taxing authority is limited, lack experienced teachers, lack appropriate texts, and may not provide even physical security. In other communities, the initiative of teachers and principals is deadened by the weight of an educational bureaucracy. National attitudes account for another part of the problem: much of the country still assumes that modest skills will earn good wages, and that low levels of academic competence are good enough. In a recent cross-national study of the mathematical proficiency of 13-year olds, South Korean students ranked first in mathematical skills, and U.S. students last. But more significant than the scores were the attitudes toward them: When asked whether they regard themselves as "good at mathematics," only 23 percent of the Korean students answered yes; 68 percent of the U.S. students answered yes.

But there is a fact which poor schools and low expectations do not explain. Many children are failing to learn even the most basic skills—skills that schools are well-enough equipped to teach, and which most schools seriously attempt to teach. Why is that?

The source of the problem

From the time they leave the places of their birth until they arrive in preschool or kindergarten, children are largely invisible to society. No one outside a child's family may recognize difficulties likely to impede learning until they become evident in school. But professionals in child development know that the sources of those difficulties develop long before school begins.

The fact is that success in school depends on characteristics largely formed by the age of three. And those characteristics are not a fund of factual knowledge, nor the ability to read or to recite the alphabet, nor familiarity with numbers or colors. They are the characteristics of children, of whatever background, who come to school curious, confident, conscious of what behavior is expected of them, comfortable in seeking assistance, and able to get along with others—qualities largely developed, or not developed, in the first three years of life. This holds true in good schools and poor schools, in large schools and small schools, in public schools and private schools.

Almost all students who do poorly in school lack some or all of those fundamental characteristics. No matter what potential they are born with, children who have little confidence that they can figure things out, who have not been encouraged to reach achievable goals, who lack the capacity to express feelings, ideas and simple concepts, or who feel no responsibility to control their behavior (or are unable to control it) are poorly equipped to learn in school.

And there are many such children. In some states close to one out of five children are required to repeat first grade. Many of them, unable to respond to any but the most ideal teaching conditions, then fall further and further behind. Often they become more discouraged, more withdrawn, more resentful and, in some cases, more disruptive through each grade.

Does that mean that the quality of schooling doesn't matter, that the readiness of the student is everything? No. The quality of schooling matters greatly. Schools *can* make a difference. Our schools must take children as they find them and do their best for all. Moreover, even poorly prepared children can be helped by individualized attention from devoted and persistent teachers, especially if the children's families are also involved. But that kind of attention is often not available. And, in any event, in education as in medicine, preventing problems is far more effective than trying to cure them. All our children should arrive at school able to benefit from the classroom.

Effective early childhood programs

High-quality programs clearly do advance children's development and help prepare them for school. A recent study funded by the Robert Wood Johnson Foundation compared the effects of an intense, comprehensive child care program, as against medical care only, for almost 1,000 low birthweight infants and their families. It found that at 3 years of age, those children receiving medical care only were three times as likely to have IQ scores classified as developmentally delayed, and a higher incidence of behavior problems.

Another well-documented study traced the long-term consequences of an extensive program that offered child care and family support to low-income families in Syracuse,

New York, over the first five years of their children's lives. A follow-up study ten years later compared children who had been in the program with others of similar background who had not. The program children—especially the girls—were doing far better in school. Almost twice as many of the program children expected to remain in school for the following five years. And as young adolescents, the program boys had committed roughly one-fourth the number of offenses as the nonprogram boys, and their offenses were far less severe.

A third study followed two sets of impoverished Connecticut families with infants and toddlers. One group received a coordinated set of health and social services; the other did not. A decade later, all but one of the children in the first group were doing well in school. Overall, more of the mothers were self-supporting, had completed more schooling and had fewer subsequent children than those in the second. Fewer of the children in the families that had received the services were in special education. Their school attendance was better, and they were "liked more" by their teachers. The families that had not received services were costing, on average, almost $3,000 more per family each year, in welfare and special education, than those who had.

Not all early childhood programs produce such effects, but the characteristics of those that do are known. Effective programs are readily accessible. Their staffs are adequate in number; can offer a broad spectrum of services; cross traditional, professional and bureaucratic boundaries; adapt to individual differences in child and family needs; see the child in the context of the family and the family in the context of its surroundings; are perceived by their clients as being caring, respectful and trustworthy; and provide services that are coherent and easy to use.

Like high-quality early childhood programs, good preschools can also help children prepare for school. But preschools often face the same problem that schools do: they find themselves having to help 3- and 4-year olds overcome delayed development and alter self-defeating attitudes already deeply ingrained. When preschools succeed at those tasks they perform an immensely valuable service. But prevention is better still, and prevention must start earlier. It must start in the first weeks and months of life, because it is then that children first try to understand and master their environment, and find those efforts encouraged—or not; first attempt to concentrate and find it possible—or not; first conclude that the world is orderly and predictable—or not; first learn that others are basically supportive and caring—or not. It is in those years that the foundations for later learning are laid down. Or are not.

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The task

The next chapter suggests how the attributes essential to learning in school normally develop, and what may keep them from doing so. The happy and fundamental fact is that in stable and supportive environments, virtually all healthy infants begin to develop those attributes almost automatically. Healthy babies are born curious. They are eager and able to learn right from the start. We know now that,

immediately after birth, infants can tell the difference between their mother's voice and all other voices; they have learned to recognize that *most* familiar voice even though it must sound quite different outside the mother's body than it did in the womb. And infants immediately begin trying, from that first squint-eyed peering out at the world, to make sense of their surroundings and to communicate their basic needs. By 9 or 10 months, most infants recognize similarities and differences—pictures of animals against pictures of people, for example. They have begun to organize their observations of their world by creating categories.

•

Anyone who has watched an infant try and try again to reach an object, or to pile blocks on top of each other, or to walk, knows that infants seek not merely to understand the world but to master it. They want to be able to do things—to become competent. That desire comes from within; adults don't create it. But it is crucial that adults encourage and not destroy it. The infant who finally pulls herself upright in her crib and is greeted by a parent's expression of admiration will have a quite different attitude about herself, and about the importance of curiosity and of persistence, than the child whose achievement is ignored—or who is yelled at to lie down and go to sleep.

The infant who finally pulls herself upright in her crib and is greeted by a parent's expression of admiration will have a quite different attitude about herself, and about the importance of curiosity and of persistence, than the child whose achievement is ignored—or who is yelled at to lie down and go to sleep.

The task for parents and other caregivers is not to force development. Rather, it is to try to ensure that the practices of daily life give the infant and toddler the emotional security and encouragement—the "Heart Start"—that are the foundations for learning at home, in school and throughout later life. It is to that task that we now turn. ■

II. THE "HEART START"

A child arrives for her first day of school. She will be expected to listen, to follow directions, to be interested in toys and tasks, and to start and finish small projects. She will be expected to express her needs, to respect those of others, to be able to wait and to know when she needs help. She will be expected, in short, to have the "Heart Start" capabilities she needs to learn in school.

Characteristics that affect performance in school

The specific characteristics related to learning in school are as follows:

1. *Confidence*—A sense of control and mastery of one's body, behavior and world; the child's sense that he is more likely than not to succeed at what he undertakes, and that adults will be helpful.
2. *Curiosity*—The sense that finding out about things is positive and leads to pleasure.
3. *Intentionality*—The wish and capacity to have an impact, and to act upon that with persistence. This is clearly related to a sense of competence, of being effective.
4. *Self-Control*—The ability to modulate and control one's own actions in age-appropriate ways; a sense of inner control.
5. *Relatedness*—The ability to engage with others based on the sense of being understood by and understanding others.
6. *Capacity to Communicate*—The wish and ability to verbally exchange ideas, feelings and concepts with others. This is related to a sense of trust in others and of pleasure in engaging with others, including adults.
7. *Cooperativeness*—The ability to balance one's own needs with those of others in a group activity.

These characteristics equip children with a "school literacy" more basic than knowledge of numbers and letters. It is the knowledge of *how to learn*.

Annie, one of twenty-five first graders, is busily working at her desk. She smiles as the teacher walks by. With obvious pride, she is circling the letters that go with the pictures (Z for zebra, etc.). Though she did not at first understand what to do, she had asked the teachers to help her, and she had watched the children around her.

Nearby, Bobby is sitting half on and half off his chair. A puzzled expression on his face, he is looking around at the other children. After scribbling different colors on his sheet of paper, he is getting restless. He grabs a friend's pencil and starts taunting him. The teacher scolds him and puts him in the "time out" chair in the back of the room. He looks relieved. He now knows what he will be doing for the next few minutes. And, even better, no one else knows that he was confused by the assignment.

How is it that children develop any or all of the seven characteristics which allow them to be closer to Annie than Bobby when they reach school age?

Infants differ; so do parents

All infants are born learners. They come into the world eager to engage with it. But each

infant has unique physical, sensory and emotional capacities; each will put his or her own stamp on everything that he or she encounters. Even identical events are different experiences for different babies. Sally hates to be swaddled and becomes severely distressed when restrained in that way. Barry loves it, calms immediately, and remains awake and alert. Darnell also calms but falls instantly asleep. Antricia is startled by the smallest sounds but loves to watch movements. A soft touch startles Billy but not a firm one. He enjoys being talked to. Shatel rarely stops moving, reacts very strongly to almost everything, eats hard, sleeps hard, and puts all of herself into every activity.

Parents differ as well. Some parents will tune in quickly to a baby's unique characteristics; others will have little sense of what their child needs. Some find the stress of caring for an infant overwhelming and even infuriating at times. Because of these infant and parent differences, as well as the very different situations in which they find themselves, no two relationships that develop between babies and those who care for them are entirely alike.

Yet it is within those relationships that much of the baby's crucial learning will occur, and all babies are learning about the same things. They are all learning about their bodies, about objects, about who they are, how to feel about themselves, and what they can expect of those who care for them. Such basic human capacities as the ability to feel trusting, to experience intimacy with others and to negotiate with others begin to develop from their earliest moments.

Two styles of parenting

A young mother hears a cry from her 5-week-old baby in the nearby crib. It is 3 a.m. The mother's initial dismay quickly turns to anticipation of the feeding that will now begin.

The baby senses the light turned on, feels the touches and cradling of her body and, though hungry, begins immediately to calm from the cues that tell her that her discomfort is about to end. For half-an-hour the baby nurses, pausing between bursts of sucking and gazing up into her mother's eyes, woozily but with what the mother feels is pleasure and recognition. During the pauses the mother speaks softly to her new daughter. The baby smiles, watching her mother's shifting expressions. "Hi, Emily—sweet Emily—you are very pretty. Were you hungry? Do you want more? Do you need a burp? I am glad to see you even if it is 3 a.m." The baby slowly begins to drift off. Her mother puts her in the crib, kisses her, covers her, and says "Sweet dreams."

What is happening is utterly ordinary; a mother is feeding her baby. But what is happening to the baby is extraordinary. Because while being fed, she is learning about gentleness, about cries being answered, about her ability to make giants come running. She is beginning to feel effective and secure. She is beginning to sense the subtle rhythm of exchange with her mother. It is the beginning of learning that she is worth responding to, that she is important, and that something or someone can be counted upon.

A young mother hears a cry from her 5-week-old baby in the crib nearby. It is 3 a.m. The mother tenses. She has just fallen asleep after a fight with the baby's father. The baby's cries rapidly intensify. "Oh be quiet," says the mother exhaustedly. "I can't take one more thing." The baby cries more and more loudly.

"Shut that baby up" comes a shout from beyond the thin wall—"shut that damn baby up!" The mother slams her

fist against the wall and shouts, "Shut up yourself." She rolls out of bed and approaches the crib. "I'm coming—I'm coming. Damn it—shut up." She lifts the baby up and he quiets a bit. "Already think you can just cry and get what you want, don't you? That won't last long, I can tell you. Come on—let's get it over with."

As the baby begins to nurse, the mother stares fixedly ahead, going over the recent angry fight. The mother grows more agitated as she recalls the details. The baby responds to his mother's tension by squirming restlessly. Finally, the baby stiffens, arches, draws back from his mother's nipple and yelps. "You don't want to eat? Fine, don't eat," says the mother, and abruptly puts the still hungry baby back into the crib. The baby cries and the mother feels a surge of anger. "Shut up—just shut up." The mother leaves the bedroom, shuts the door and in the kitchen turns up the radio loudly enough so that she cannot hear the baby cry. He cries until he falls into an exhausted sleep.

This baby is also learning. He is learning that to be handled and held can be uncomfortable and distressing; that desperate crying may lead only to a sharp and angry voice; that his needs and wants are not important and that there is no one to count on.

Either of these experiences could occur to the same baby at different times, under different circumstances. But when either one of these experiences is typical, the effects on that baby's sense of self and of the world are profound. The first baby's sense of security and of her feelings about others will be primarily positive; the second baby's will be mainly negative. Essential qualities and attitudes are already beginning to be shaped.

This little boy is 8 months old. He has been sitting in a jump seat for several hours during the last of which he has

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slept. He awakens when the door slams and he hears a deep voice. Immediately he begins to bounce and crow. Every inch of him is excited. His father enters the room, puts down his lunch bucket and walks toward him. Now the baby nearly catapults himself out of his jump chair as his father smiles and reaches for him, saying, "And hello to you—big guy—come and give your old man a hug." The baby grips his father's shirt and reaches for his cheek and his father nuzzles the baby's hand with his mouth. The father asks if his son is ready to watch some of the ball game. The baby mirrors his father's happy feeling and responds with a chain of babbling. The father widens his eyes and listens, then asks his son's opinion of today's starting pitcher. The baby looks away—calming himself—the father waits and the baby turns back, locks eyes with his father and produces a long string of syllables, ending in a laugh. His father grins and says, "You may be right." The baby's mother asks the father if he'll change the baby's diaper. The father grimaces but agrees. Throughout the diaper change, the baby and his father continue a dialogue full of body movements, facial expressiveness and vocal exchanges.

This baby anticipates the pleasure he will have with his father. He has already learned that most of the time his father feels very good with him and he feels very good with his father. He has also learned to have "conversations" with his father—to initiate, be intentional, take turns, listen and respond. He feels respected, understood. He likes himself.

This little boy is 8 months old. He has been sitting in a jump seat for several hours, during the last of which he has slept. He awakens when the door slams and he hears a deep voice. Awake, he wiggles restlessly and looks in the seat's tray for something to handle. Everything is on the floor. He makes a noise of frustration—not loud—just expressive of his feelings. He is trying to communicate.

The father comes in and tosses his coat over a chair. The baby grunts and brings his hand to his mouth. The father glances at him and then glances away. The mother calls to the father and says probably the baby needs changing. Would he change him while she finishes dinner?

The father says, sarcastically, "Thanks a lot—is that a special present for me?" He disappears briefly and then suddenly, the baby is abruptly lifted out of the seat from the rear. The baby is surprised but only stiffens and is quiet. "Ok stinko—let's clean up your load." The baby is placed on his back to be changed. He lies still—chewing on his hand. Once, he twists, extends his arm to grasp an object and lifts his leg. The father pulls him back flat, lightly slaps his thigh and says sharply, "Stay still—I'm almost done." The baby's eyes widen but he stays quiet—just chewing on his hand. The father finishes quickly and returns him to his jump chair.

This baby is also learning. He is learning to be wary in what he communicates to his father. He has learned to be passive and to curb his curiosity. He has no sense that his father enjoys him. He feels neither understood nor confident. He has learned nothing about turn taking, or mood sharing, or dialogue with his father.

A 2-1/2-year-old girl approaches her busy mother with some three-dimensional puzzle pieces that are not fitting together. She is distressed and a bit

whiny. Her mother glances down, smiles, and says—"What has caused that misery?" The little girl says, "I can't do it." The mother continues sorting the papers she's working on but leans over to study the pieces. "I think if you put the green one on top it will work." The little girl stops whining and tries it. Then she whines again and says, "It doesn't—it doesn't work." "Well," her mother says, "I can't help until I finish this—later." She gets only this far when her 2-1/2-year-old daughter hurls the pieces on the floor and they all come apart. Her mother looks at her ruefully and then says, "Come here." The little girl comes and leans against her. "Old dumb puzzle made you mad—it's ok. We'll fix it later. Could you help me put away my work?" The 2-1/2-year-old pulls herself together, smiles, and helps her put her papers away.

This little girl is learning about her importance, about help, about mutual respect and about how feeling bad can be followed by feeling good. She is learning a lot about being understood and about cooperation. She expects to be listened to and she listens. Despite the frustration of the puzzle, she feels basically competent, appreciated and responsible. She is now in control. Given experiences such as these, she is likely to enter school with enthusiasm and eagerness to take part.

A 2-1/2-year-old girl approaches her busy mother with some three-dimensional puzzle pieces that are not fitting together. She is distressed and a bit whiny. Without looking at her, her mother says, "Stop that blubbering —I've got enough to do without listening to that." The little girl tries to show her mother the puzzle. "Don't bother me now—I've got to finish this." The little girl walks away and suddenly hurls the pieces to the floor. Her mother turns to her and says, "You know better than to throw things. If you're going to cry and carry on, just go to your room and stay there or you'll get something to cry about." The girl screams louder, runs to her room and slams the door.

This child is learning—probably she is continuing to learn—that her needs are not important, that she is not understood, that feeling bad means more feeling bad and that you can't really count on anyone when you need them. She is not respected nor does she respect, and she feels out of control. If that exchange is typical of her relationship with her mother, she is unlikely to enter school with enthusiasm or possessing the complement of feelings which would help her succeed.

Each of these vignettes represents characteristic interchanges in the lives of children, and in each of them important feelings and abilities are being created or strengthened. Over time, the very different qualities of these contrasting relationships will heavily influence the repertoire of behaviors that are characteristic of a particular child. Obviously, the child's own temperament also matters greatly. But the children in these different relationships will arrive at kindergarten with markedly differing capacities, feelings and expectations, and these will profoundly influence how they enter into the give and take of learning in school.

Sources of the problem

The main sources of the problem are clear. The infant may suffer from a physical problem, or may have temperamental characteristics which impose heavy demands on his parents. The parents themselves may be under great stress. Often now, in two-parent families, both parents work; some even hold two jobs. They have little time and less energy to devote to a small child,

though relaxed time is essential for parent and child to learn the subtleties and interplay of which each is capable. The parents may have little choice but to leave infants with an overworked child care provider or a succession of caregivers; and these, in turn, may be untrained, unaware of how powerfully their behavior will affect the child, or unmotivated to develop a truly responsive relationship with the child. The number of providers may itself become a barrier to healthy development. Infants and toddlers may do very well when cared for by two primary caregivers but almost never when cared for by three or more.

Or the parents may be nearly children themselves. The parents may be immature or aimless or depressed, angry or possibly abusing drugs. Such parents may scarcely be able to recognize their infant's or toddler's needs. Still less are they likely to respond to them with consistent sympathy or understanding. Some parents have learned, from difficult experiences in their own childhood, to be abusive or distant—frightened of closeness or relentlessly critical.

Many parents simply don't understand how much the infant or toddler learns from how he is treated. The parent who correctly reads his baby's communications confirms his baby's ability to communicate and to achieve a positive result. The parent who seriously misreads such communications stifles expressiveness and creates wariness and inhibition. A parent may consider her baby's explorations as deliberate misbehavior, and continuously say no to the baby's activity. She may think that by saying no she is training her baby in self-control, and not realize that the "no's" are conveying "don't be curious," inhibiting one of the traits which needs treasuring and encouraging.

Equally important, many parents don't appreciate that pretend play is essential to a child's ultimate intellectual and creative capacities. Such simple play is the beginning of problem solving and logic. The parent who joins his child in patting the baby doll and feeding the stuffed doggy or who extends the child's play by a comment ("I think little Minnie is looking tired. Does she need a nap or a story?") is encouraging the creation of ideas and the mastery of feelings through play. The child is being encouraged to be creative and active instead of depending on passive entertainment. This capacity for play also gradually enables a child to depend on herself as a source of feelings of interest and enjoyment.

However barriers to the infant's healthy emotional development may originate, they can readily set off a self-reinforcing downward spiral. Feeling rejected by a child's unresponsiveness, or frustrated by a child's fussiness or irritability, a distracted or vulnerable mother may avoid or punish her. Isolated and understimulated, or perhaps overstimulated, an infant may become more withdrawn or more difficult, making her mother and others even less willing to attend to her. Once such a problem has developed, the 2-month-old may rarely be picked up and held, or she may be picked up mechanically by a parent or other caretaker who goes on talking to someone else or watching television. If caregivers habitually handle her roughly, or subject her to loud noises and startling and unpredictable behavior, the effect is worse. She may protect herself by tuning out or by becoming anxious, fearful or aggressive.

Thus, through simple, everyday actions, beginning in the first days and weeks of life, the infant begins to develop the characteristics that, for good or ill, will strongly influence performance in school. The behavior of the infant's principal caregivers creates in the infant's mind and heart capacities and patterns of expectations that will deeply affect her functioning in

all realms. The child who experiences attention, affection, mutual communication, respect and generosity will expect to continue to experience such treatment and will feel that he or she deserves it. And the child who receives this crucial "Heart Start" will tend, in turn, to be affectionate, attentive, communicative, respectful and generous.

Similarly, a child who has been often ignored, or subjected to angry, unpredictable or violent behavior—whatever the initial cause—is likely to display the same behaviors in relations with others. That is what she will regard as normal, not only as a child but as an adult as well. Experiences in infancy help form not only the capacities, feelings and skills essential to success in the educational setting but the deepest patterns of behavior—patterns likely to be repeated when a child becomes a parent.

The most damaging possibilities

Some effects may be even more serious than that. We know that the effects of some forms of early deprivation on animals are not only profound but enduring. Newborn rats kept in isolation fail to produce growth hormones or to gain weight; instead they produce a protein which appears to stunt growth. Newborn monkeys raised for some months in a darkened room retain the capacity to see but never learn to distinguish simple shapes from one another. Monkeys raised normally can readily do so. Kittens blindfolded for the first six months never fully learn to use their eyes.

We do not know from animal studies to what extent various kinds of deprivation may permanently affect the human infant. But we know that the infant's brain reaches two-thirds of its full size by the age of 3, that in size and complexity it evolves, in those years, more rapidly than it ever will again, and that certain kinds of learning occur far more readily in infancy than afterward. We also know that severe stress can affect hormone production and produce physical damage in the learning centers of the brain. So even if some kinds of learning and development can to some extent be made up in later years, the effects of early experience are profound and likely to be long-lasting.

Thus, in the first four years of life, children are experiencing their most fundamental lessons. They are learning to focus, to be intimate, to control their behavior, to be imaginative, to separate reality from fantasy, to have positive self-esteem and to feel deeply connected to the adults in their lives. A child who cannot focus his attention, who is suspicious rather than trusting, sad or angry rather than optimistic, destructive rather than respectful and one who is overcome with anxiety, preoccupied with frightening fantasy and feels generally unhappy about himself—such a child has little opportunity at all, let alone equal opportunity to claim the possibilities of the world as his own.

The consequences of neglect

Simple neglect may produce problems in school even more severe than those resulting from physical abuse. A recent and comprehensive survey studied the performance in school of children suffering from maltreatment of many kinds. It concluded that neglected children demonstrated the most severe difficulties, performing more poorly than any other group of maltreated youngsters. As a group, the neglected youngsters were more anxious, inattentive, and apathetic than other children. They relied heavily on the teacher for encouragement and approval, and were both aggressive and withdrawn in social situations. Sixty-five percent (65%) of these children were either retained in grade or had already been referred for special services by the end of their first year.

School is only one setting in which the consequences of early maltreatment appear. Drug use occurs most frequently among adolescents whose early childhoods were spent in distracted, disorganized and chaotic households. Juvenile delinquency is closely associated with a history of family violence or abuse. And for children growing up in communities marked by violence, chaos and unpredictability the school culture and its expectations may seem so remote as to be wholly irrelevant.

So we know that the environment in which an infant spends his first months and years will greatly affect how he will later manage his life in general and how readily he will be able to utilize opportunities for formal learning. And we know now—much more clearly than twenty or even ten years ago—how that effect is produced. We know how positive kinds of behavior from caregivers, be they parents, other family members or skilled child care providers can help a child develop the emotional foundation for living a rewarding life. We know that many families lack the understanding, the capacity or the support to provide such experiences and that many child care situations fail to provide it. We know that children without that foundation have difficulty in school and so are subjected to the additional stress of public failure. We know that whole grade levels—indeed whole schools—are being swamped by the early tragedies of these children.

Then what is to be done? ■

III. WHAT IS TO BE DONE?

What needs to be done can be expressed quite simply. It is to create the conditions which will give all American children the opportunity to develop, in the first years of their lives, those characteristics—confidence, curiosity, persistence, a sense of responsibility, the capacity to understand the feelings of others and to cooperate with them—which are most important to their later success in school.

Young children have four kinds of needs. The first relates to the infant himself: it is simply good physical **health**. The second and third needs relate to him through his parents and other caregivers. One is **time**: sufficient time for caregiver and child together so that an intimate and supportive relationship can develop. The other is **responsive caregiving**: caregiving based on an understanding of how children develop, and how to encourage and respond to that development. Finally, both infant and caregiver need a **safe and supportive environment.**

1. Assuring Health

Good physical health is obviously basic. Infants exposed during pregnancy to drugs or alcohol, or born prematurely or with low birthweight, or exposed in infancy to high lead levels, or poorly nourished, or who have contracted measles or polio for lack of routine immunization, may still develop the characteristics essential to school readiness, but they begin with grave disadvantages.

Those disadvantages are almost wholly avoidable, but our healthcare system, as it now operates, does not avoid them. Almost one-quarter of expectant mothers in the United States receive no prenatal care, receive too little, or receive it too late. In 1989, the U.S. infant mortality rate was 9.8 per 1,000 live births, a higher rate than virtually all other industrialized countries. (The rate for African-American babies was more than twice that for whites.) More than one-quarter of fetuses are exposed to drugs. Almost 7 percent of our babies are born at a low birthweight (defined as 2500 grams—5.5 lbs.—or less), and 1.3 percent of our babies are born at a very low birthweight, defined as 1500 grams (3.5 lbs.) or less. Almost ten percent (10%) of school children have a known disabling condition, and many of these conditions could have been found and treated much earlier. But almost seventeen percent (17%) of families have no access to a regular physician; thirty percent (30%) of children and their families are being seen only in emergencies, and then by physicians with no prior knowledge of the family or the child.

What measures are needed to ensure good health to a much higher proportion of American children?

a. Providing affordable and accessible health care

The main reasons that avoidable health and nutrition problems develop in infants are that their families are unable to pay for routine health care, or do not have access to it.

- ❑ **Universal health care coverage is essential. It should be coupled with an expansion of those programs (community and migrant health centers, WIC programs, early intervention programs for children with special needs, and health service corps, for example) that place prevention-oriented healthcare facilities and personnel in otherwise underserved areas.**

Though comprehensive coverage is critical, its design involves many considerations beyond the needs of infants. We therefore take no position as to the most appropriate form of a comprehensive system. But two other health-related measures, both more specifically oriented toward young children, deserve discussion.

b. Welcoming, assessing and tracking

Even where affordable health care is available, it may not be fully utilized. A number of European countries deal with this problem by creating strong financial incentives for parents to participate in prenatal care and then to maintain a schedule of continued preventive care. Some U.S. localities, similarly, are experimenting with programs in which the families of all newborns are visited by health care personnel, given small presents for the infants, and informed about and welcomed into their local health care system. Such visits demonstrate that a friendly and caring health system is available, and effectively draw families into it. They also provide occasions during which the home visitor can assess whether any obvious physical, financial or relational problems might put the infant at risk. Some communities are developing computer-based systems for identifying infants with special health care needs and maintaining cumulative and continuously current medical records on them, available to all health care providers. Some communities are combining such welcoming and follow-up systems.

Different systems will best fit differing places, but it is clear that, if well-administered, most such systems do draw into regular health care infants who might otherwise not receive it, or better inform health care providers of the range of conditions and treatments the infants have experienced, or both. Therefore:

- **The federal government should offer the states funding for a range of identification and follow-up systems. It should also provide advice as to best current practices in identification and follow-up, and supply technical assistance in the design and establishment of such systems.**

- **States and localities should assess their own needs, determine what systems would best meet those needs, and put them rapidly in place.**

c. Making child care a health resource

Every week, child care providers—in centers or homes—see almost two-thirds of our nation's children under age 4. Understandably, that causes concern about hazards to health: groups of very young children spend a great deal of time together under the supervision of adults, many of whom are not fully trained in the health and safety requirements for children so young. But there is a reverse to this coin: a very high proportion of the nation's youngest and most vulnerable children are being seen every day by persons whose calling is their care and well-being. Those persons can be trained to recognize possible disabilities, developmental delay, and signs of abuse or other problems. They can be encouraged to raise health questions with families. They can help refer families to the relevant health services. Where they can link up with the appropriate medical professionals their facilities may be appropriate sites for the provision of services, such as screening and immunizations, or regular well-baby care. Child care providers, both in centers and in family day care, are potentially a great resource for promoting infant health. We ought to make good on that potential. Therefore:

- **States should require that all child care providers be trained to recognize apparent health and developmental problems, to encourage parents to seek appropriate treatment, and to identify the appropriate services. State licensing and monitoring systems should support those practices.**

- **Federal funding should be structured to induce state agencies supervising health, child care and developmental disabilities to collaborate in making screening and follow-up referrals a reality.**

2. Assuring Time for Unhurried Caring

a. Time with parents and family members

Health alone, of course, is not enough. There is a time requirement as well. Infants and toddlers need unhurried time with those who are important to them—lots of it. One reason is that the better a caregiver knows a child, the more readily she will recognize even the subtle cues that tell what that child needs. Infants and toddlers especially need someone present steadily enough to sense their temperaments, to learn their rhythms and signs, and to respond in ways that the infants can predict and understand.

A second reason why time is essential—time to simply be there, time to listen—is that it signals the importance that beloved adults attach to the relationship. It tells infants they have value; are not simply being fitted in.

Finally, time is necessary for parents as well. Parents need time to adjust emotionally to parenthood, to come to enjoy their babies, to learn to feel competent as caregivers, to detect possible difficulties, to get advice if necessary, and to arrange for child care if and when they return to work.

Indeed, as the child moves to later infancy and toddlerhood, he needs the time and attention of more than one adult. As Dr. Urie Bronfenbrenner has noted:

> *Progressively more complex interaction and emotional attachment between caregiver and child depend in substantial degree on the*

availability and involvement of another adult, a third party who assists, encourages, spells off, gives status to, and expresses admiration for the person caring for and engaging in joint activity with the child.

Ideally, this is the child's other parent. It can also be any other loving adult who is part of the household. But whoever that third party may be, whether in the family or not, he or she also needs the time to play that supplementary role—as well as some understanding of its importance.

But as already noted, the circumstances of many parents make such conditions exceptional. Over one-quarter (27%) of American infants are born to single parents, many of whom are teenagers. (By contrast, only 1.4% of Japanese births are to teenagers.) Well over half (52.5%) of mothers of children under 3 are in the labor force. Sixty-one percent (61%) of these work full-time. Only about forty percent (40%) of working women in the United States are entitled to paid maternity, disability or parental leave, and only another thirty percent (30%) to unpaid leave. In contrast, most European countries provide a six-month paid leave; and several—such as Austria, Finland and Germany—provide two or three years of paid leave.

In short, many parents who may manage to see to it that their children are healthy and well-fed and adequately clothed cannot do much more than that. They cannot spend unhurried time with their infants and toddlers, so too few of the enlivening interactions of adult and child so essential to learning occur. Where the child's temperament is difficult, or her signals hard to interpret, or where a mother has difficulty making the emotional adjustment to parenthood, or is slow to gain confidence, long periods of time in which parent and child can be together are especially needed—and likely to be especially lacking. We therefore propose that:

- **The federal government should enact legislation to require that employers provide job-protected parental leave for up to one year, but for at least six months, following childbirth or adoption. Such leave could be paid for through a new contributory social insurance benefit, or an enhanced version of the Temporary Disability Insurance benefits now provided in five of our larger states.**

- **Until federal legislation is enacted, all states should require employers to provide parental leave for at least six months at the time of childbirth or adoption.**

- **Federal incentives should encourage states to put parental leave legislation quickly in place.**

- **In advance of legal requirements, employers who have not already done so should provide family leave at childbirth, adoption or illness, as an investment in their work force, present and future.**

b. Stability of child care providers over time

The care of children is changing. More and more children are moving into child care, at younger ages, and for longer periods of time. What they need is a special kind of care. It's not babysitting and it's not school. It is a continuing relationship with a few caring people in an intimate setting. Just as they need parents who read and respond to their signals with ease and who give them the sense of being important, so infants need this from one or two particular child care providers. And continuity of care is essential. When infants lose a caregiver, they really lose a sense of themselves and of the way things work.

Yet the economics of child care militate against both intimacy and continuity of care. Child care workers in the United States average $5.35 per hour, lower than the average wages of those who work in kennels or who park cars. The pay is so poor that they tend to leave for other jobs as soon as possible; the turnover rate for child care workers in centers in 1988 was forty-one percent (41%)! And in order to make ends meet, centers and family day care homes are tempted to place children in groups too large and supervised by too few adults. As of 1992, only three states set standards that meet the ratios we propose below. Nine states have ratios that are higher than 6:1 for infants. Nineteen states have ratios that are higher than 8:1 for toddlers. Fifteen states set no standards whatsoever for group size for infants. The result is a double concern for many parents: having too little time to be with their infants, they are forced to seek child care where no one else has much time for them either. "Parental choice" between low quality programs is no choice. We therefore propose:

(1) Stronger state standards and federal leadership

- **The states should set timetables for bringing infant and toddler child care standards regarding group size and adult/child ratios up to at least minimally adequate levels. For children not yet mobile, group sizes should be no larger than six; ratios should be no more than 1:3. For children crawling and up to 18 months, the group size should be no more than nine; ratios no more than 1:3. For children 18 months to 3 years, group sizes should be no more than twelve; ratios 1:4. Centers and group homes with mixed age groupings should never have more than two children under 2 years of age in a single group. Family day care providers caring for mixed age groupings should never have more than two children under 2 years of age.**

- **Federal child care legislation should be amended to provide incentives for states to rapidly implement such standards.**

- **A federal entity should regularly survey the progress of states, and identify and promote promising state initiatives.**

- **States and localities should increase guidance to families on how to choose quality child care for their infants and toddlers.**

(2) Higher minimum child care wages

- **State legislation should set the wages of infant and toddler care providers at a level substantially above the minimum wage, with mandated benefits. Infant and toddler child care providers with substantial training should have minimum salaries set by state law equivalent to the state's primary school teachers.**

- **Through refundable child care tax benefits or other cash subsidies to low-income parents and/or child care providers, the federal government should begin to bridge the gap between what families can afford to pay and what child care really costs if staff are paid appropriately.**

(3) Continuity of caregivers: best practice for child care programs

- **State guidance should promote continuity of care. Child care centers**

should be strongly encouraged to have providers move up the age range, so that they care for the same children from infancy to preschool.

- **Child care programs should assign a particular caregiver for each child.**

- **Federal child care legislation and corresponding federal regulations should eliminate conflicting regulations, eligibility standards and funding mechanisms so that families are not forced to change child care situations in order to receive child care subsidies. States should move quickly to implement these changes.**

3. Promoting Responsive Caregiving

In addition to good physical health and unhurried time with their caregivers, infants need caregivers who understand how children develop, and understand that responsive and encouraging relationships with caregivers are crucial in fostering that development.

a. The responsive understanding of parents

Almost all parents understand instinctively that an infant's development will depend, in some degree, on whether their relationship with the child is supportive, loving and stimulating. For parents to form such relationships, they require the support which enhances their own feelings of competence and confidence. All parents require the social networks of family, friends and community which provide the concrete and emotional assistance essential to family well-being. They also require access to resources, and information on children's growth and development.

Some parents need special assistance. How much assistance a parent needs is highly variable. Some may need only the interest and support of their family health care providers, their extended family and a circle of friends. If they need additional advice, they may find it in the many helpful publications available, or from educational television programs.

But other parents are not in such a happy position. Young parents of first children may have had no previous experience with infants. Even experienced parents may be uncertain as to how to respond to a difficult or unusually sensitive child. And many parents are simply not aware of just how critical it is that the infant experience responsive, nurturing and stable relationships. Nor may they fully understand how caregiver and child affect each other.

In extreme cases, the result is neglect or abuse. In 1990, there were 2.5 million reports of child abuse in the United States, exactly double the rate of 1980. Almost ninety percent (90%) of those children who died as a result of abuse or neglect were under age 5; fifty-three percent (53%) were under age 1. But reported abuse or neglect is only a fraction of a much larger phenomenon. For every reported case of actual abuse, there are clearly many cases of parents unable to give their infants or toddlers the full measure of support and encouragement that constitute a "Heart Start."

The following three policies, each already partially in place, should be applied nationwide:

(1) Parenting education before and after childbirth. All students in elementary, middle and high school should learn about with the stages of infant development and the effects on infants of differing kinds of caregiver behavior. By the time these students become parents the details may be forgotten, but the central messages of such courses are likely to endure: that prenatal care, attention and responsiveness to

infant behavior are essential. Conveying those messages in elementary, secondary and high schools has the additional benefit that future fathers as well as mothers will be exposed to them.

Similarly, prospective parents of both sexes should be strongly encouraged to participate in the actual care of their child as well as in childbirth discussions or classes. Therefore:

- **States should fund and local education agencies should organize early and widespread expansion of parent education courses in elementary, middle and high schools.**

- **A variety of institutions—clinics, community health centers, group medical practices, schools and junior colleges—should, among themselves, create comprehensive networks of parenting classes and discussion groups. Health care and child care practitioners should routinely urge both present and prospective parents to participate in such classes or groups. Where needed, incentives should be offered to induce participation.**

It is absolutely essential, of course, that such courses be sensitive to the cultural, educational, ethnic and class backgrounds of the different participants. They must be as respectful of the participants as we want the participants to be of their infants.

(2) Family resource programs. In many communities, professionals, parents and advocates have formed networks and established programs to assist parents in child-rearing. These efforts, generally referred to as family support or family resource programs, differ widely in form, scale and emphasis. But they typically provide some combination of parent education, parent support groups, drop-in centers where parents can meet with program staff and other families on an informal basis, information and referral to child care, health care, counseling and health screening for infants. As prevention programs, they have the important function of identifying troubled families early on, assuring that they receive necessary services in time to avoid the need for more intensive remedial measures. And they share a number of fundamentals: they are community-based, prevention-oriented, concerned about the whole range of issues that parents may face, and skillful at building on strengths rather than emphasizing deficits. They should become an essential piece of the fabric of community services. Yet very little public money has so far been available to them. Therefore:

- **Federal, state and local governments, in partnership with private community organizations, should develop and expand community-based family support programs to provide parents with the knowledge, skills and support they need to raise their children.**

(3) Child care and health care providers as colleagues of parents. Both child care and health care providers can and should play a much larger role than they presently do in enlarging parents' understanding of the needs of their infants and toddlers. So should related professionals, such as WIC program personnel. They should be brought to think of themselves as colleagues of each child's parents in sharing information about the child, pointing out developmental milestones and individual differences, and discussing various approaches to particular problems. One useful and increasingly common practice is for pediatricians to have child development specialists work with them to discuss these issues with parents. All pediatricians and other health care providers

should either work with such colleagues or be prepared to spend significant amounts of time themselves on these issues with parents. Accordingly, supervised training in infant and toddler development and in the principles of effective interaction with families should be required for all child care and health care providers and related personnel. [*Preparing Practitioners to Work with Infants, Toddlers and Their Families*, a set of reports for the professions, for educators, for parents and for policymakers published by **ZERO TO THREE**, forms a strong foundation upon which to design such training.] And child care providers should be backed by organizations able to provide inservice training, developmental assessment, referrals to more intensive services, and direct services for infants and their families with special needs.

Therefore:

(a) Recommendations for health care personnel

- **Preservice and inservice training for health care providers and nutritionists should be broadened to emphasize the importance of establishing a relationship with parents in which discussions of the child's development, and of the parents' role in it, can naturally occur.**

- **The protocols of health clinics and WIC programs should require that time be taken to attempt to build such relationships and that discussions of development and parenting concerns are regularly initiated.**

- **Pediatricians and other health care providers should either take on these functions or hire child development specialists to do so.**

- **National standards for the certification of physicians, public health nurses, nurse practitioners and nutritionists should include competence in the essentials of parenting and of infant development.**

(b) Recommendations for child care personnel

- **All preservice and inservice training for infant care providers should be broadened to emphasize the importance of establishing a relationship with parents in which discussions of the child's development, and of the parents' role in it, can naturally occur.**

- **State and local regulations should require that child care providers attempt to establish such relationships and that they regularly initiate discussions of developmental and parenting concerns with families.**

b. The responsive understanding of child care providers

A number of the proposals above assume that child care providers are themselves well-trained and sensitive to the importance of their role. Fortunately many are, and their number is increasing. But even of the child care providers working in centers, only some sixty percent (60%) have any training in child development. A much lower percentage have training in infant and toddler development. In family day care homes, the percentages are lower still. This is not surprising. Only twenty-five states require training in child development for child care providers. Only fifteen state licensing offices require specialized training for infant and toddler care. Only three states require family day care providers to have specialized training in infant/toddler care. Furthermore, thirteen

states allow exemptions if the child care is sponsored by a church or by the school system.

Therefore:

- **States and communities should require that child care providers have training specifically in infant development and family-centered infant care sufficient to meet the Child Development Associate Credential or similar standards. There should be no exemptions to this policy for schools or religious organizations.**

- **Federal funds should provide incentives for the early enactment of infant and toddler training requirements by states.**

- **The federal government should act as a clearinghouse for the promulgation of best practice and technical assistance in infant and toddler child care.**

4. Assuring Safe and Supportive Environments

a. An adequate standard of living

In addition to good health care, and to loving adults with enough time to develop strong bonds, infants and toddlers also require safe and supportive environments. Evidence abounds that many small children exposed to actual violence or accounts of violence suffer irreparable harm as they try to make sense of these seemingly random acts. The violence prevalent in some impoverished environments can permanently damage the emotional and intellectual development of young children.

Decent safe housing is also highly important; it affects children's health and families' ability to parent.

Infants and toddlers and their families need enough income to support an adequate standard of living. At present, one out of every four children under age 3 lives in a family whose income is below the poverty threshold. Children under age 3 are economically more vulnerable than any other age group in the United States and disproportionately recipients of Aid to Families with Dependent Children (AFDC). The following measures are the minimum that should be enacted:

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- ❑ **A Refundable Child Tax Credit of $1,000, indexed to the cost of living, and provided for each child in a family under the age of 18. Recommended by the National Commission on Children, such a tax credit would supplement family income when earnings are low, help to defray some of the economic costs of child rearing, and reduce the child poverty rate.**

- ❑ **Until such a credit is enacted, the Earned Income Tax Credit (EITC) should be expanded and made more responsive to family size.**

- ❑ **At least on an experimental basis, enact a child support assurance benefit, as described in the report of the National Commission on Children, which would provide a guaranteed minimum child support benefit for children in one-parent families when the absent parent fails to pay support, or pays it irregularly or at an inadequate level.**

b. Adequate space in child care settings

Small children cared for in groups need enough space to move about freely, explore and try out new challenges. Adequate space also reduces noise, the communication of disease, conflict over toys and physical intrusion of one child on another. And space is important for caregivers as well. Research has shown that in more spacious environments caregivers are more inclined to smile at children, and less inclined to say no.

- ❑ **States should require as usable play space in center-based group care:**
  - **0-8 months [for a group no larger than six]—*350 square feet per group***
  - **8-18 months [for a group no larger than nine]—*500 square feet per group***
  - **18-36 months [for a group no larger then twelve]—*600 square feet per group***
- ❑ **in family child care: [for a mixed age group with no more than two children under age 2]—*600 square feet per group***

5. Providing Special Help for Families with Special Problems

One of the thorniest problems for policymakers and service providers alike arises from the fact that some of the families whose infants most desperately need better health and more understanding caregivers are those that do not readily reach out for support or easily accept it. Perhaps the family has had no experience with supportive service relationships and fears that professionals will be too nosy or bossy. Perhaps a parent has an alcohol or drug abuse problem, lives in an isolated rural location, or believes that asking for help is a sign of failure. The family may not at first realize their child has a physical problem. Or the mother may be clinically depressed, unable to make a decision to seek help. The family may be homeless, or the mother may be a teenage single parent, rejected by her family, or alone in a new town. The mother may be housebound because she fears violence in the neighborhood. Or a family may be worried that signs of physical abuse will mean their child will be taken away from them.

There are many circumstances, in short, under which a family in need of help may not reach out for it. Yet every community should find and

connect with all families in need, not simply those that show up for services. Outreach and follow-up systems, such as those mentioned above, are one way to begin to address this problem. Family resource and home visiting programs are another. But communities must also meet the needs of those parents with more serious mental health or early intervention needs. Mental health and child abuse treatment programs which focus on the troubled relationships of parents and their infants and toddlers in particular should be expanded, with additional funds made available for training their providers.

Therefore:

- **Every community should develop a plan for identifying and coordinating care for all families of infants and toddlers in need of intensive services.**

- **Every community should work to develop an array of *integrated* services for families with more severe needs.**

- **Foundations and state and federal governments should provide funding for high-quality specialized mental health, child abuse treatment, foster care, and/or early intervention services. Those services should be accessible in all communities to families of children with complex medical needs, and to parents who are teenagers, or who have mental health problems, are drug-addicted or are otherwise not fully functional.**

- **Foundations and state and federal governments should provide funds for specialized family-centered training for those who work with parents and foster parents and their infants and toddlers. [ZERO TO THREE'S own TASK materials provide a strong foundation for such training.]** ■

A NEW PERSPECTIVE

To summarize: health, and unhurried, responsive caregiving in a safe, supportive environment are what all babies need. The various recommendations for services here proposed seem to us essential if the United States is to help families give their children the "Heart Start"—the emotional foundations for school readiness—provided by so many other nations.

Those services that do exist are often now organized and managed in ways that are convenient for their providers, but daunting or inaccessible or demeaning to the intended beneficiaries. That is understandable, especially when providers are overstretched and in short supply. But the end results are often poor. Services that are difficult to reach, or impersonally provided, or poorly explained will often not be used. Or they may need to be offered repeatedly before they are accepted. That leaves providers spread thinner, recipients more discouraged, and society inclined to blame the victims.

Thus, something beyond the simple establishment of services or funding of programs is required. What is needed is a commitment to support parents across the board in their most important work. It is a determination to make services not only available but attractive, understandable and fully useful to the persons they are intended to help—to provide services in the context of continuing and respectful relationships between provider and parent, and in settings as familiar and convenient as possible.

Each of the proposals we have made is important, and together their impact would be profound. They add up to a deep and comprehensive commitment to our nation's youngest and most vulnerable citizens. But the fundamental need is not for a collection of particular measures, but for a perspective. And it should be applied to <u>all</u> in this area—public and private. All policy initiatives—in addition to the other ways in which they must be assessed—should be viewed in terms of their effects on

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infants and toddlers. At all levels of government, and in private institutions as well, we should learn to ask ourselves: what are the consequences for infants and their families? Will this policy improve infant health? Will it give infants and toddlers more time, or less, with parents or other trusted caregivers? Will it tend to enlarge what parents and other caregivers understand about the needs of very young children, or not? Does it tend to confirm parents' importance in the lives of their children, or to diminish that importance? Can it be revised to serve its other purposes and still improve—or at least not worsen—the situation of the nation's youngest children? Does it accord with our nation's professed belief in the crucial importance of the family?

We have made many recommendations, and over the short run some will be expensive. But the net result will not be costly. For one thing, most of the needed policies and services already exist in part, or in some locations. For another, the services we recommend will resolve problems rather than simply processing them; they thus reduce needs for further service. And the costs will be broadly shared; a number of our proposals require federal or state funding, but many relate to employers and to private agencies and foundations.

The deepest economy of these proposals is that of the long run. Over the long run, of course, they are not a cost but an investment. They are an investment in our most precious resources. And that investment will pay back quite quickly, as virtually all of our 5- and 6-year-old children begin to arrive at school confident, curious, persistent, able to communicate and to get along with others—ready, in short, to thrive in school. ■

SUMMARY OF RECOMMENDATIONS

	Responsibility			
	Federal	State	Local	Corporate
1. Assuring Health				
a. Providing affordable and accessible health care				
❑ Universal health care coverage is essential. It should be coupled with an expansion of those programs (community and migrant health centers, WIC programs, early intervention programs for children with special needs, and health service corps, for example) that place prevention-oriented health care facilities and personnel in otherwise underserved areas.	✔	✔		
b. Welcoming, assessing and tracking				
❑ The federal government should offer the states funding for a range of identification and follow-up systems. It should also provide advice as to best current practices in identification and follow-up, and supply technical assistance in the design and establishment of such systems.	✔			
❑ States and localities should assess their own needs, determine what systems would best meet those needs, and put them rapidly in place.		✔	✔	
c. Making child care a health resource				
❑ States should require that all child care providers be trained to recognize apparent health and developmental problems, to encourage parents to seek appropriate treatment, and to identify the appropriate services. State licensing and monitoring systems should support those practices.		✔		
❑ Federal funding should be structured to induce state agencies supervising health, child care and developmental disabilities to collaborate in making screening and follow-up referrals a reality.	✔			
2. Assuring Time for Unhurried Caring				
a. Time with parents and family members				
❑ The federal government should enact legislation to require that employers provide job-protected parental leave for up to one year, but for at least six months, following childbirth or adoption. Such leave could be paid for through a new contributory social insurance benefit, or an enhanced version of the Temporary Disability Insurance benefits now provided in five of our larger states.	✔			
❑ Until federal legislation is enacted, all states should require employers to provide parental leave for at least six months at the time of childbirth or adoption.		✔		
❑ Federal incentives should encourage states to put parental leave legislation quickly in place.	✔			
❑ In advance of legal requirements, employers who have not already done so should provide family leave at childbirth, adoption or illness, as an investment in their work force, present and future.				✔

SUMMARY OF RECOMMENDATIONS

	Responsibility			
	Federal	State	Local	Corporate
b. Stability of child care providers over time				
(1) Stronger state standards and federal leadership				
❑ The states should set timetables for bringing infant and toddler child care standards regarding group size and adult/child ratios up to at least minimally adequate levels. For children not yet mobile, group sizes should be no larger than six; ratios should be no more than 1:3. For children crawling and up to 18 months, the group size should be no more than nine; ratios no more than 1:3. For children 18 months to 3 years, group sizes should be no more than twelve; ratios 1:4. Centers and group homes with mixed age groupings should never have more than two children under 2 years of age in a single group. Family day care providers caring for mixed age groupings should never have more than two children under 2 years of age.		✔		
❑ Federal child care legislation should be amended to provide incentives for states to rapidly implement such standards.	✔			
❑ A federal entity should regularly survey the progress of states, and identify and promote promising state initiatives.	✔			
❑ States and localities should increase guidance to families on how to choose quality child care for their infants and toddlers.		✔	✔	
(2) Higher minimum child care wages				
❑ State legislation should set the wages of infant and toddler care providers at a level substantially above the minimum wage, with mandated benefits. Infant and toddler child care providers with substantial training should have minimum salaries set by state law equivalent to the state's primary school teachers.		✔		
❑ Through refundable child care tax benefits or other cash subsidies to low-income parents and/or child care providers, the federal government should begin to bridge the gap between what families can afford to pay and what child care really costs if staff are paid appropriately.	✔			
(3) Continuity of caregivers: best practice for child care programs				
❑ State guidance should promote continuity of care. Child care centers should be strongly encouraged to have providers move up the age range, so that they care for the same children from infancy to preschool.		✔		
❑ Child care programs should assign a particular caregiver for each child.			✔	
❑ Federal child care legislation and corresponding federal regulations should eliminate conflicting regulations, eligibility standards and funding mechanisms so that families are not forced to change child care situations in order to receive child care subsidies. States should move quickly to implement these changes.	✔	✔		

SUMMARY OF RECOMMENDATIONS

3. Promoting Responsive Caregiving

a. The responsive understanding of parents

(1) Parenting education before and after childbirth

	Responsibility			
	Federal	State	Local	Corporate
❑ States should fund and local education agencies should organize early and widespread expansion of parent education courses in elementary, middle and high-schools.		✔	✔	
❑ A variety of institutions - clinics, community health centers, group medical practices, schools and junior colleges - should, among themselves, create comprehensive networks of parenting classes and discussion groups. Health care and child care practitioners should routinely urge both present and prospective parents to participate in such classes or groups. Where needed, incentives should be offered to induce participation.			✔	

(2) Family resource programs

❑ Federal, state and local governments, in partnership with private community organizations, should develop and expand community-based family support programs to provide parents with the knowledge, skills and support they need to raise their children.	✔	✔	✔	✔

(3) Child care and health care providers as colleagues of parents

(a) Recommendations for health care personnel

❑ Preservice and inservice training for health care providers and nutritionists should be broadened to emphasize the importance of establishing a relationship with parents in which discussions of the child's development, and of the parents' role in it, can naturally occur.		✔	✔	
❑ The protocols of health clinics and WIC programs should require that time be taken to attempt to build such relationships and that discussions of development and parenting concerns are regularly initiated.			✔	
❑ Pediatricians and other health care providers should either take on these functions or hire child development specialists to do so.			✔	
❑ National standards for the certification of physicians, public health nurses, nurse practitioners and nutritionists should include competence in the essentials of parenting and of infant development.	✔			

(b) Recommendations for child care personnel

❑ All preservice and inservice training for infant care providers should be broadened to emphasize the importance of establishing a relationship with parents in which discussions of the child's development, and of the parents' role in it, can naturally occur.			✔	
❑ State and local regulations should require that child care providers attempt to establish such relationships and that they regularly initiate discussions of developmental and parenting concerns with families.		✔	✔	

SUMMARY OF RECOMMENDATIONS

	Responsibility			
	Federal	State	Local	Corporate
b. The responsive understanding of child care providers				
❑ States and communities should require that child care providers have training specifically in infant development and family-centered infant care sufficient to meet the Child Development Associate Credential or similar standards. There should be no exemptions to this policy for schools or religious organizations.		✔	✔	
❑ Federal funds should provide incentives for the early enactment of infant and toddler training requirements by states.	✔			
❑ The federal government should act as a clearinghouse for the promulgation of best practice and technical assistance in infant and toddler child care.	✔			
4. Assuring Safe and Supportive Environments				
a. An adequate standard of living				
❑ A Refundable Child Tax Credit of $1,000, indexed to the cost of living, and provided for each child in a family under the age of eighteen. Recommended by the National Commission on Children, such a tax credit would supplement family income when earnings are low, help to defray some of the economic costs of child rearing, and reduce the child poverty rate.	✔			
❑ Until such a credit is enacted, the Earned Income Tax Credit (EITC) should be expanded and made more responsive to family size.	✔			
❑ At least on an experimental basis, enact a child support assurance benefit, as described in the report of the National Commission on Children, which would provide a guaranteed minimum child support benefit for children in one-parent families when the absent parent fails to pay support, or pays it irregularly or at an inadequate level.	✔			
b. Adequate space in child care settings				
❑ States should require as usable play space in center-based group care:		✔		
0-8 months [for a group no larger than six] *350 square feet per group*				
8-18 months [for a group no larger than nine] *500 square feet per group*				
18-36 months [for a group no larger than twelve] *600 square feet per group*				
❑ in family child care: [for a mixed age group with no more than two children under age 2] *600 square feet per group*				

SUMMARY OF RECOMMENDATIONS

5. Providing Special Help for Families with Special Problems

	Responsibility			
	Federal	State	Local	Corporate
❑ Every community should develop a plan for identifying and coordinating care for all families of infants and toddlers in need of intensive services.			✔	
❑ Every community should work to develop an array of *integrated* services for families with more severe needs. Such services should be delivered through the establishment of a meaningful, continuous relationship between family and professional.			✔	
❑ Foundations and state and federal governments should provide funding for high-quality specialized mental health, child abuse treatment, foster care, and/or early intervention services. Those services should be accessible in all communities to families of children with complex medical needs, and to parents who are teenagers, or who have mental health problems, are drug addicted or are otherwise not fully functional.	✔	✔	✔	
❑ Foundations and state and federal governments should provide funds for specialized family-centered training for those who work with parents and foster parents and their infants and toddlers. [**ZERO TO THREE'S** own TASK materials provide a strong foundation for such training.]	✔	✔		

Endnotes

I. What Is At Stake?

Pages 1-3

Corporate testing for entry-level skills, the amount employers spend on training, and the change in the workforce:

The following articles are taken from an insert dated February 9, 1990, entitled, "Smarter Jobs, Dumber Workers. Is that America's Future? The Knowledge Gap."

DeVenuta, K. (2/9/90). "Education Openers." Wall Street Journal. R5.

Richards, B. (2/9/90). "Wanting Workers." Wall Street Journal. R10-11.

Swasy, A., and Hymowitz, C. (2/9/90). "The Workplace Revolution." Wall Street Journal. R6-8.

Concern about education:

National Commission of the States. (1990). "International Assessment of Educational Progress." Denver, CO: National Commission of the States.

Stevenson, H., and Lee, S. (1990). Contexts of Achievement: A Study of American, Chinese, and Japanese Children. Monographs of the Society for Research in Child Development. Serial No. 221, Vol. 55, Nos. 1-2.

Stevenson, H., and Stigler, J. (1992). The Learning Gap. New York: Simon & Schuster (Summit Books).

Our nation's expenditures on education:

President's Budget Message, FY '92/'93. (1/92). GAO Report #041-001-00366-5.

Stewart, A. et al., Congressional Research Service. (1991). "Head Start: Percentage of Eligible Children Served and Recent Expansions." CRS Report for Congress. Washington, DC: CRS, pp. 1-6.

Comparison of American and foreign students:

Laosa, L.M. (1984). "Social Policies toward Children of Diverse Ethnic, Racial and Language Groups in the United States." In Stevenson, H.W., & A.E. Siegel (Eds.) Child Development Research and Social Policy: Volume One. Chicago, IL: The University of Chicago Press. *(Prepared under the auspices of the Society for Research in Child Development.)*

Stevenson, H., and Stigler, J. (1992). The Learning Gap. New York: Simon & Schuster (Summit Books).

Those children who are required to repeat first grade:

Shepard, L. (1989). Flunking Grades: Research and Policies on Retention. London, England: Falmer Press.

The experience of children in their early school years:

Meisels, S.J. (April, 1989). "High Stakes Testing in Kindergarten." Educational Leadership. 46, 16-22.

Meisels, S.J. (1992). "Doing Harm by Doing Good: Iatrogenic Effects of Early Childhood Enrollment and Promotion Policies." Early Childhood Research Quarterly. (In press).

Need for children to arrive in school ready to learn:

Boyer, E.L. (1991). Ready to Learn: A Mandate for the Nation. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

National Association of State Boards of Education (NASBE). (1991). Caring Communities: Supporting Young Children and Families. *(The Report of the National Task Force on School Readiness)* Alexandria, VA: NASBE.

National Governor's Association (NGA). (1990). *Consensus for Change, Educating America: State Strategies for Achieving the National Education Goals.* (The Report of the Task Force on Education) Washington, DC: NGA.

Pages 3-5

Studies of the effectiveness of early prevention and intervention:

Berrueta-Clement, J.R., Schweinhart, L.J., Barnett, W.S., Epstein, A.S., & Weikart, D.P. (1984). Changed Lives: The Effects of the Perry Preschool Program on Youths through Age 19. (Monographs of the High/Scope Educational Research Foundation, No.8). Ypsilanti, MI: High/Scope.

Darlington, R.B., Royce, J.M., Snipper, A.S., Murray, H.W., & Lazar, I. (1980). "Preschool Programs and Later Competence of Children from Low-Income Families." Science. 208, 202-204.

Gross, R.T., and Hayes, C. (1991). "Implementing a Multi-site, Multidisciplinary Clinical Trial: The Infant Health and Development Program." Zero to Three. XI: 4, 1-7. *Funded by the Robert Wood Johnson Foundation.*

Infant Health & Development Program. (1990). "Enhancing the Outcomes of Low-Birth- Weight, Premature Infants." Journal of the American Medical Association. 263, 3035- 3042.

Lally, J.R., and Honig, A.S. (1977). "The Family Development Research Program: A Program for Prenatal, Infant, & Early Childhood Enrichment. Final Report." Syracuse, NY: Syracuse University.

Lally, J.R., Mangione, P.L., Honig, A.S., & Wittner, D.S. (1988). "More Pride, Less Delinquency: Findings from the Ten-Year Follow-up Study of the Syracuse University Family Development Research Program." Zero to Three. VIII: 4, 13-18.

Meisels, S.J. (1992). "Early Intervention: A Matter of Context." Zero to Three. XII: 3, 1- 6.

Olds, D.L., Henderson, C.R., Chamberlin, R., & Tatelbaum, R. (1986). "Preventing Child Abuse and Neglect: A Randomized Trial of Nurse Home Visitation." Pediatrics. 78, 65- 78.

Price, R., Cowen, E., Lorion, R., & Ramos-McKay, J. (1988). Fourteen Ounces of Prevention. Washington, DC: American Psychological Association.

Provence, S., and Naylor, A. (1983). Working with Disadvantaged Parents and Their Children. New Haven, CT: Yale University Press. *This is the study of the Connecticut families.*

Ramey, C.T., and Ramey, S.L. (1992). At Risk Does Not Mean Doomed. Birmingham, AL: National Health/Education Consortium.

Seitz, V., Rosenbaum, L.K., & Apfel, N.H. (1985). "Effects of Family Support Intervention: A Ten-Year Follow-up." Child Development. 56, 376-391. *A follow-up on the study of Connecticut families.*

Zigler, E. (1988). "The IQ Pendulum." [Review of H. Spitz, The Raising of Intelligence.] Readings. 3:2, 4-9.

II. The "Heart Start"

Page 7

Annie and Bobby:

Greenspan, S.I., and Lodish, R. (December, 1991). "School Literacy: The Real ABC's." Phi Delta Kappan. 300-308.

Pages 7-13

Publications that describe early social and emotional development and/or suggest a relationship between early development or experience and later characteristics, in alphabetical order:

Achenbach, T.M., Howell, C.T., Quay, H.C., & Conners, C.K. (1991). "National Survey of Problems and Competencies Among 4-to 16-year-olds: Parents Reports for Normative and Clinical Samples." Monographs of the Society for Research in Child Development. 225: 3.

Arend, R., Gove, F., & Sroufe, L.A. (1979). "Continuity of Individual Adaptation from Infancy to Kindergarten: A Predictive Study of Ego-Resiliency and Curiosity in Preschoolers." Child Development. 50, 950-959.

Bar-Tal, D., Raviv, A., & Leiser, T. (1980). "The Development of Altruistic Behavior: Empirical Evidence." Developmental Psychology. 16, 516-524.

Belsky, J., and Nezworski, T. (Eds.) (1988). Clinical Implications of Attachment. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Block, J., Block, J. H., & Keyes, S. (1988) "Longitudinally Foretelling Drug Usage in Adolescence: Early Childhood Personality and Environmental Precursors." Child Development. 59: 2, 336-355.

Bloom, B. (1964). Stability and Change in Human Characteristics. New York: Wiley.

Bradley, R. H., Caldwell, B.M., Rock, S. L., Barnard, K. E., Gray, C., Hammond, M.A., Mitchell, S., Siegel, L., Ramey, C.T., Gottfried, A.W., & Johnson, D. L. (1990) "Home Environment and Cognitive Development in the First 3 Years of Life: A Collaborative Study Involving Six Sites and Three Ethnic Groups in North America." Developmental Psychology. 2: 5, 217-235.

Brazelton, T.B., and Cramer, B.G. (1990). The Earliest Relationship. Reading, MA: Addison-Wesley Publishing Company, p. 199.

Bronfenbrenner, U. (1979). The Ecology of Human Development: Experiments by Nature and Design. Cambridge, MA: Harvard University Press.

California Department of Education & Far West Laboratory. (1990-1992). The Program for Infant/Toddler Caregivers. Infant/Toddler Caregiving: Curriculum Guide Series. (*A Guide to Culturally Sensitive Care, A Guide to Routines, A Guide to Setting Up the Environment, A Guide to Social-Emotional Growth and Socialization, A Guide to Language Development and Communication, A Guide to Creating Partnerships and Parents,* and *A Guide to Intellectual Development and Creativity)* Sacramento, CA and Sausalito, CA.

Campos, J.J., Barrett, K.C., Lamb, M.E., Goldsmith, H.H., & Stenberg, C. (1983). "Socioemotional Development." In M. Haith, & J.J. Campos (Eds.) Handbook of Child Psychology: Vol. 2, Infancy and Developmental Psychobiology. New York: Wiley, pp. 783- 916.

Cicchetti, D., Toth, S. L., & Hennessy, K. (1989). "Research on the Consequences of Child Maltreatment and Its Application to Educational Settings." Topics in Early Childhood Special Education. 9:2, 43.

Cohn, D. A. (1990). "Child-Mother Attachment of Six-Year Olds and Social Competence at School." Child Development. 61, 152-162.

Doge, K. A., Bates, J. E., & Pettit, G. S. (1990). "Mechanisms in the Cycle of Violence." Science. 250, 1682.

Emde, R.N. (1989). "The Infant's Relationship Experience: Developmental and Affective Aspects." In A.J. Sameroff, & R.N. Emde (Eds.) Relationship Disturbances in Early Childhood. New York: Basic Books, Inc.

Emde, R., Johnson, W.F., & Easterbrooks, M.A. (1988). "The Do's and Don'ts of Early Moral Development: Psychoanalytic Tradition and Current Research." In J. Kagan, & S. Lamb (Eds.) The Emergence of Morality. Chicago: University of Chicago Press.

Emde, R., and Sameroff, A.(1989). "Understanding Early Relationship Disturbances." In A.J. Sameroff, & R.N. Emde (Eds.) Relationship Disturbances in Early Childhood. New York: Basic Books.

Erickson, M.F., and Pianta, R.C. (1989). "New Lunchbox, Old Feelings: What Kids Bring to School." Early Education and Development. 1:1, 40.

Erickson, M.F., Sroufe, L.A., & Egeland, B. (1985). "The Relationship Between Quality of Attachment and Behavior Problems in Preschool in a High Risk Sample." In I. Betherton & E. Waters (Eds.) "Growing Points in Attachment Theory and Research." Monographs of the Society of Research in Child Development. 50, 1-2 Series No. 209.

Escalona, S. (1987). Critical Issues in the Early Development of Premature Infants. Newhaven, CT: Yale University Press.

Fish, M., Stifter, C.A., & Belsky, J. (1991). "Conditions of Continuity and Discontinuity in Infant Negative Emotionality: Newborn to Five Months." Child Development. 62, 1525- 1537.

Fonagy, P., Steele, H., & Steele, M. (1991). "Maternal Representations of Attachment During Pregnancy Predict the Organization of Infant-Mother Attachment at One-Year of Age." Child Development. 62, 891-905.

Fraiberg, S., Adelson, E., & Shapiro, V. (1980). "Ghosts in the Nursery: A Psychoanalytic Approach to the Problems of Impaired Mother-Infant Relationships." In S. Fraiberg (Ed.) Clinical Studies in Infant Mental Health: The First Year of Life. New York: Basic Books. 164-196.

George, C., and Main, M. (1979). "Social Interactions of Young Abused Children: Approach, Avoidance, and Aggression." Child Development. 50, 306-318.

Greenspan, S.I. (1992). Infancy and Early Childhood: the Practice of Clinical Assessment and Intervention with Emotional and Developmental Challenges. Madison, CT: International Universities Press.

Greenspan, S.I., and Lodish, R. (December, 1991). "School Literacy: The Real ABC's." Phi Delta Kappan. 300-308.

Greenspan, S.I., and Greenspan, N.T. (1985). First Feelings: Milestones in the Emotional Development of Your Infant and Child from Birth to Age 4. New York: Viking Press.

Greenspan, S.I. (1989). "Equal Opportunity for Infants and Young Children: Preventive Services for Children in a Multi-Risk Environment." In G. Miller (Ed.) Giving Children a Chance: The Case for More Effective National Policies. Washington, DC: Center for National Policy Press.

Halpern, R. "Poverty and Infant Development." In C. Zeanah (Ed.) Handbook of Infant Mental Health. Guilford Press. (In press).

Hamburg, D.A. (1987). "Early Intervention to Prevent Lifelong Damage: Lessons From Current Research." *Testimony for the Senate Committee on Labor and Human Resources and the House Committee on Education and Labor*. 9/9, 10.

Hamburg, D.A. (1987). "Fundamental Building Blocks of Early Life." Report of the President, Carnegie Corporation. New York: Carnegie Corporation.

Hamburg, D.A. (1992). Today's Children: Creating a Future for a Generation in Crisis. New York: Random House.

Hoffman-Plotkin, D., and Twentyman, C.T. (1984). "A Multimodal Assessment of Behavioral and Cognitive Deficits in Abused and Neglected Preschoolers." Child Development. 55, 794-802.

Howes, C., and Eldredge, R. (1985). "Responses of Abused, Neglected, and Nonmaltreated Children to the Behaviors of their Peers." Journal of Applied Developmental Psychology. 6, 261-270.

Hunt, J. McV. (1961). Intelligence and Experience. New York: Ronald Press.

Izard, C.E., Haynes, O.M., Chisholm, G., & Baak, K. (1991). "Emotional Determinants of Infant-Mother Attachment." Child Development. 62, 906-917.

Jacobson, S.W., and Frye, K.F. (1991). "Effect of Maternal Social Support on Attachment: Experimental Evidence." Child Development. 62, 572-582.

Kagan, J. (1981). The Second Year: The Emergence of Self-Awareness. Cambridge, MA: Harvard University Press.

Kagan, J. (1984). The Nature of the Child. New York: Basic Books, Inc.

Kaufman, J., and Cicchetti, D. (1989). "Effects of Maltreatment on School-aged Children's Socio-emotional Development: Assessments in a Day-Camp Setting." Developmental Psychology. 25, 516-524.

LaFreniere, P.J., and Sroufe, L.A. (1985). "Profiles of Peer Competence in the Preschool: Interrelations among Measures, Influence of Social Ecology, and Relation to Attachment History." Developmental Psychology. 21, 56-69.

Lally, J.R. (1984). "Three Views of Child Neglect: Expanding Visions of Preventive Intervention." Child Abuse and Neglect. 8, 243-254.

Lally, J.R. (1988). Infant Toddler Caregiving: A Guide to Social-Emotional Growth and Socialization. Sacramento, CA: California Department of Education and Far West Laboratory, Center for Child and Family Studies, Sausalito, CA, p. 50.

Lewis, M. (1992). Shame: The Exposed Self. New York: Free Press.

Lewis, M., Feiring, C., McGuffog, C., & Jaskir, J. (1984). "Predicting Psychopathology in Six-Year Olds from Early Social Relations." Child Development. 55, 123-136.

Lieberman, A.F. (1991). "Attachment and Exploration: The Toddler's Dilemma." Zero to Three. XI: 3, 6-11.

Luthar, S.S., and Zigler, E. (1991). "Vulnerability and Competence: A Review of Research on Resilience in Childhood." American Journal of Orthopsychiatry. 61, 6-22.

Lyons-Ruth, K. "Maternal Depressive Symptoms, Disorganized Infant-Mother Attachment Relationships and Hostile-Aggressive Behavior in the Preschool Classroom: A Prospective Longitudinal View from Infancy to Age Five." In D. Cicchetti, & S. Toth (Eds.) Rochester Symposium on Developmental Psychopathology, Vol. 4: A Developmental Approach to Affective Disorders. Rochester, NY: University of Rochester. (In press).

Lyons-Ruth, K., Alpern, L., & Repacholi, B. (1991). "Disorganized Infant Attachment Classification and Maternal Psychosocial Problems as Predictors of Hostile-Aggressive Behavior in the Preschool Classroom." In K. Lyons-Ruth (chair), Disorganized Attachment Behavior from Infancy to Age Six: Maternal Context, Representational Processes and Child Maladaptation. *Symposium presented at the biennial meeting of the Society for Research in Child Development, April, 1991, Seattle, WA.*

Mayes, L.C., and Carter, A.S. (1990). "Emerging Social Regulatory Capacities as Seen in the Still-Face Situation." Child Development. 6, 754-763.

Meisels, S.J., and Provence, S. with the Task Force on Screening and Assessment of the National Early Childhood Technical Assistance System (NEC*TAS) (1989). Screening and Assessment: Guidelines for Identifying Young Disabled and Developmentally Vulnerable Children and their Families. Washington, DC: National Center for Clinical Infant Programs.

Meisels, S.J., and Shonkoff, J.P. (Eds.) (1990). Handbook of Early Childhood Intervention. New York: Cambridge University Press.

Morisset, C.E., Barnard, K.E., Greenberg, M.T., Booth, C.L., & Spieker, S.J. (1990). "Environmental Influences on Early Language Development: The Context of Social Risk." Development and Psychopathology. 2: 2, 127-149.

Nugent, J.K., and Brazelton, T.B. (1989). "Preventive Intervention with Infants and Families: The NBAS Model." Infant Mental Health Journal. 10, 2.

Piaget, J. (1974). The Origins of Intelligence in Children. New York: International Universities Press.
Pianta, R.C., Sroufe, L.A., & Egeland, B. (1989). "Continuity and Discontinuity in Maternal Sensitivity at 6, 24, and 42 Months in a High-Risk Sample." Child Development. 60, 481-487.

Provence, S. (1990). "Interactional Issues: Infants, Parents, Professionals." Infants and Young Children. 3:1, 1-7.

Provence, S., and Lipton, R.C. (1962). Infants in Institutions. New York: International Universities Press.

Provence, S., and Naylor, A. (1983). Working with Disadvantaged Parents and Children: Scientific Issues and Practice. New Haven, CT: Yale University Press.

Radke-Yarrow, M., Cummings, E.M., Kuczynski, L., & Chapman, M. (1985). "Patterns of Attachment in Two- and Three- Year-Olds in Normal Families and Families with Parental Depression." Child Development. 56, 884-893.

Rubin, K.H., Both, L., Zahn-Waxler, C., Cummings, E.M., & Wilkinson, M. (1991). "Dyadic Play Behaviors of Children of Well and Depressed Mothers." Development and Psychopathology. 3, 243-251.

Sameroff, A. J. (1986). "Environmental Context of Child Development." Journal of Pediatrics. 109, 192-200.

Sameroff, A.J. (1989). "Principles of Development and Psychopathology." In A.J. Sameroff, & R.N. Emde (Eds.) Relationship Disturbances in Early Childhood. New York: Basic Books, Inc.

Sameroff, A. J. (1990). "Prevention of Developmental Psychopathology Using the Transactional Model: Perspectives on Host, Risk Agent, and Environmental Interactions." Paper presented at the Conference on the Present Status and Future Needs of Research on Prevention of Mental Disorders, Washington, DC: National Institutes on Mental Health, Department of Health and Human Services.

Sameroff, A. J., Seifer, R., Barocas, R., Zax, M., & Greenspan, S. (1987). "Intelligence Quotient Scores of 4-Year Old Children: Social-Emotional Risk Factors." Pediatrics. 79: 3, 343-350.

Schorr, L.B., with Schorr, D. (1988). Within our Reach: Breaking the Cycle of Disadvantage. New York: Anchor Press/Doubleday.

Seitz, V., Rosenbaum, L.K., & Apfel, N.H. (1985). "Effects of Family Support Intervention: A Ten-Year Follow-up." Child Development. 56, 376-391.

Spangler, G. (1990). "Mother, Child, and Situational Correlates of Toddlers' Social Competence." Infant Behavior and Development. 13, 405-419.

Sroufe, L.A. (1979). "The Coherence of Individual Development: Early Care, Attachment, and Subsequent Developmental Issues." American Psychologist. 34:10, 834-841.

Sroufe, L.A. (1983). "Infant-Caregiver Attachment and Patterns of Adaptation and Competence: Roots of Maladaptation and Competence." In M. Perlmutter (Ed.) Minnesota Symposia in Child Development. Hillsdale, NJ: Erlbaum. 16, 41-81.

Stattin, H., and Klackenberg-Larsson, I. (1990). "The Relationship Between Maternal Attributes in the Early Life of the Child's Future Criminal Behavior." Development and Psychopathology. 2:2, 99-111.

Stern, D.N. (1985). The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology. New York: Basic Books, Inc.

Teti, D.M., and Gelfand, D.M. (1991). "Behavioral Competence among Mothers of Infants in the First Year: The Mediational Role of Maternal Self-Efficacy." Child Development. 62, 918-929.

Waters, E., Wippman, J., & Sroufe, L.A. (1979). "Attachment, Positive Affect, and Competence in the Peer Group: Two Studies in Construct Validation." Child Development. 50, 821-829.

Winnicott, D. W. (1987). The Child, the Family and the Outside World. Reading, MA: Addison-Wesley.

Yarrow, L.J. (1981). "Beyond Cognition: The Development of Mastery Motivation." Zero to Three. I:3, 1-5.

Zahn-Waxler, C., Cummings, M., McKnew, D., & Radke-Yarrow, M. (1984). "Altruism, Aggression and Social Interactions in Young Children with a Manic-Depressive Parent." Child Development. 55, 112-122.

Zahn-Waxler, C., and Radke-Yarrow, M. "The Development of Altruism: Alternative Research Strategies." In N. Eisenberg (Ed.) The Development of Prosocial Behavior. In Eisenberg, N. (1992) The Caring Child. Cambridge, MA: Harvard University Press. p. 153.

Zigler, E., and Hall, N. (1989). "Physical Child Abuse in America: Past, Present and Future." In D. Cicchetti, & V. Carlson (Eds.) Child Maltreatment. New York: Cambridge University Press. pp. 38-75.

Pages 13-14

Effects of deprivation on animals:

Harlow, H.R., and Harlow, M.H. (1966). "Learning to Love." American Scientist. 54, 244-272.

Hunt, J. McV. (1961). Intelligence and Experience. New York: Ronald Press.

Rosenblum, L.A., and Harlow, H.R. (1963). "Approach-Avoidance Conflict in the Mother-Surrogate Situation." Psychological Reports. 12, 83-85.

Infant brain development:

Greenough, W., Black, J. & Wallace, C. (1987). "Experience and Brain Development." Child Development. 58, 539-559.

Gregory, R. (1987). "Brain Development." The Oxford Companion to the Mind. Oxford, England: Oxford University Press.

National Health/Education Consortium (NH/EC). (1991). "Healthy Brain Development: Precursor to Learning." Washington, DC: NH/EC.

Younger, B. (1990). "Infants Detection of Correlations among Feature Categories." Child Development. 61: 3, 614-620.

Children's most fundamental lessons:

Greenspan, S.I. (1989). "Equal Opportunity for Infants and Young Children: Preventive Services for Children in a Multi-Risk Environment." In G. Miller (Ed.) Giving Children a Chance: The Case for More Effective National Policies. Washington, DC: Center for National Policy Press, p. 134.

The consequences of neglect:

Erickson, M., Sroufe, L.A., & Egeland, B. (1985). "The Relationship Between Quality of Attachment and Behavior Problems in Preschool in a High Risk Sample." In I. Betherton & E. Waters (Eds.) "Growing Points in Attachment Theory and Research." Monographs of the Society of Research in Child Development. 50, 1-2. Series No. 209.

III. What Is To Be Done?

Page 15

Percentage of women who receive delayed or late prenatal care:

Singh, S., Darroch Forrest, J., & Torres, A. (1989). Prenatal Care in the United States: A State and County Inventory. Washington, DC: The Alan Guttmacher Institute. 1, 20.

Infant mortality statistics:

The Annie E. Casey Foundation, and The Center for the Study of Social Policy. (1992). Kids Count Data Book: State Profiles of Child Well-Being. Greenwich, CT & Washington, DC.

National Center for Health Statistics. (1992). "Advance Report of Final Mortality Statistics, 1989." Monthly Vital Statistics Report. 40:8. (Supplement 2: Tables 25 & 26).

United Nations Children's Fund (UNICEF). (1992). "The State of the World's Children: 1992." Oxford, England: Oxford University Press.

Percentage of children exposed in utero to drugs:

National Institute on Drug Abuse, Rockville, MD. (1991). National Household Survey on Drug Abuse: Population Estimates 1990. Washington, DC: Government Printing Office. (DHHS Publication No. (ADM) 91-1732). *Note: This percentage was derived from the babies born exposed in utero to cocaine, marijuana, and other illegal substances. It does not include babies who are born exposed in utero to cigarettes and alcohol, which are 38% and 73% respectively.*

Percentage of low birthweight babies: *(defined as less than 2500 grams or 5 pounds, 8 ounces)*

National Center for Health Statistics. (1991). Vital Statistics of the United States, 1988. Vol. I: Natality. Washington, DC: Public Health Service.

Percentage of very low birthweight babies: *(defined as less than 1500 grams or 3.3 pounds)*

National Center for Health Statistics. (1991). Vital Statistics of the United States, 1988. Vol. I: Natality. Washington, DC: Public Health Service.

Percentage of children entering school who have a disabling condition:

Department of Education. (1991). 13th Annual Report to Congress of the Implementation of IDEA. Washington, DC: Government Printing Office. *Prepared by the Division of Innovation and Development, Office of Special Education Programs, Office of Special Education and Rehabilitative Services.*

Percentage of children with no access to a regular physician, no health insurance:

Children's Defense Fund. (1991). The State of America's Children, 1991. Washington, DC: Children's Defense Fund, p. 56.

Department of Health and Human Services. (1991). National Health Interview Survey. Washington, DC: Government Printing Office.

National Association of Children's Hospital and Related Institutions. (1989). Profile of Child Health in the United States. Alexandria, VA: National Association of Children's Hospitals and Related Institutions, p. 19.

A comparison with other countries:

Miller, C.A. (1987). Maternal Health and Infant Survival. Arlington, VA: **ZERO TO THREE**/National Center for Clinical Infant Programs.

Organization for Economic Cooperation and Development. (1990). "Figures: Statistics on the Member Countries." Paris: OECD.

Williams, B.C., and Miller, C.A.. (1991). Preventive Health Care for Young Children: Findings From a 10-Country Study and Directions for United States Policy. Arlington, VA: National Center for Clinical Infant Programs, pp. 75-76.

Page 17

Percentage of infants and toddlers seen by child care providers:

Hayes, C.D., Palmer, J.L., & Zaslow, M.J. (Eds.) (1990). Who Cares for America's Children? Child Care Policy for the 1990's. Washington, DC: National Academy Press.

The importance of unhurried time:

Pawl, J. (1991). "Relationships from an Infant Mental Health Perspective." *Plenary Address to the Michigan Association for Infant Mental Health, Fifteenth Annual Conference.*

Toddlers need the time and attention of more than one adult:

Bronfenbrenner, U. (1991). "What Do Families Do?" Family Affairs. 4: 1. *(Family Affairs is published by the Institute for American Values, New York City.)*

Page 18

Our parental workforce:

Kamerman, S. B., and Kahn, A. J. (Eds.). (1991). Child Care, Parental Leave, and the Under 3's: Policy Innovation in Europe. Westport, CT: Auburn House.

Sorrentino, C. (1990). "The Changing Family in International Perspective." Monthly Labor Review. 53. *Published data from United States, Canadian, and Swedish labor force surveys; unpublished data for other countries provided by the Statistical Office of the European Communities from the European Community labor force surveys.*

Department of Labor, Bureau of Labor Statistics. (1989). Handbook of Labor Statistics. Washington, DC: Government Printing Office. (Bulletin #2340, Table 56).

Parental leave in the United States—paid and unpaid:

Department of Labor, Bureau of Labor Statistics. (1989). Employee Benefits in Medium and Large Firms, 1989.

Washington, DC: Government Printing Office. (Bulletin #2363. Stock #029-001-03056-8).

Women's Legal Defense Fund. (1991). "Family and Medical Leave." Washington, DC: Women's Legal Defense Fund.

Parental leave statistics for selected countries:

Kamerman, S.B., and Kahn, A.J. (Eds.). (1991). Child Care, Parental Leave, and the Under 3's: Policy Innovation in Europe. Westport, CT: Auburn House.

Zigler, E.F. & Frank, M. (Eds.) (1988). The Parental Leave Crisis: Toward a National Policy. New Haven, CT: Yale University Press.

A medical and social science basis for parental leave:

Hopper, P., and Zigler, E. (1988). "The Medical and Social Science Basis for a National Infant Care Leave Policy. American Journal of Orthopsychiatry. 58, 324-338.

Percentage of infants born to single parents:

National Center for Health Statistics. (1991). Vital Statistics of the United States, 1988. Vol. I: Natality. Washington, DC: Public Health Service.

Percentage of families headed by single parents:

Department of Commerce, Bureau of the Census. (1990). "Household and Family Characteristics: March 1990 and 1989." Current Population Reports. Washington, DC: Government Printing Office. (Series P-20, #447).

Percentage of total births by teenagers:

National Center for Health Statistics. (1991). Vital Statistics of the United States, 1988. Vol. I: Natality. Washington, DC: Public Health Service.

Total Japanese births by teenagers:

Statistical Bureau of the Management and Coordination Agency. (1991). The Japanese Statistical Yearbook. Tokyo, Japan: Japanese Government Printing Office. *Statistics from 1989.*

Importance of continuity of care for children:

Howes, C., and Hamilton, C.E. "Children's Relationships With Child Care Teachers: Stability and Concordance With Parental Attachments." Child Development, *(In press).*

Lally, J. R. (1990). Infant Toddler Caregiving: A Guide to Social-Emotional Growth and Socialization. Sacramento, CA: California Department of Education and Far West Laboratories, Center for Child and Family Studies, p. 50.

Lally, J.R. (1992). "Together in Care: Meeting the Intimacy Needs of Infants and Toddlers in Groups [video]." Far West Laboratories, Center for Child and Family Studies, Sacramento, CA.

Pawl, J. (1991). "Relationships from an Infant Mental Health Perspective." *Plenary Address to the Michigan Association for Infant Mental Health, Fifteenth Annual Conference.*

Page 19

Policies relating to quality of child care:

Meisels, S.J., and Sternberg, L.S. (1989). "Quality Sacrificed in Proprietary Child Care." Education Week. (June 7).

Zigler, E., and Finn-Stevenson, M. (1989). "Child Care in America: From Problem to Solution." Educational Policy. 3, 313-329.

Zigler, E. (1990). "Shaping Child Care Policies and Programs in America." American Journal of Community Psychology. 18, 183-193.

Comparison of child care wages to those of parking lot attendants and kennel workers:

Modigliani, K. (1986). "But Who Will Take Care of the Children? Child Care, Women and Devalued Labor." Journal of Education. 168: 3, 46-69.

Caregivers' salaries and turnover rates:

Howes, C. (1992). "Changes in Teachers and Shifts in Teacher-Child Relationships and Children's Social Competence. *A presentation at the "8th International Conference on Infant Studies (ICIS).* Miami Beach, FL, May 7-10.

Whitebook, M., Howes, C., & Phillips, D. (1989). Who Cares? Child Care Teachers and the Quality of Care in America. Oakland, CA: Child Care Employee Project.

State policies on infant care:

Adams, G. (1990). Who Knows How Safe? The Status of State Efforts to Ensure Quality Child Care. Washington, DC: Children's Defense Fund.

Adams, G., and Sandfort, J.R. (1992). State Investments in Child Care and Early Childhood Education. Washington, DC: Children's Defense Fund.

Morgan, G. (1992). National State of Child Care Regulation *(Chapter on Ratios).* Washington, DC: National Association for the Education of Young Children. *(In press).*

Page 20

Child abuse statistics:

Daro, D., and McCurdy, K. (1990). "Current Trends in Child Abuse Reporting and Fatalities: The Results of the 1990 Annual Fifty-State Survey." Chicago, IL: National Committee for Prevention of Child Abuse.

Page 21

Family resource programs:

Kagan, J., Powell, Weissbourd, B., & Zigler, E. (1987). America's Family Support Programs: Perspective and Prospects. New Haven, CT: Yale University Press.

Page 22

Training recommendations:

Fenichel, E. S., and Eggbeer, L. in collaboration with the TASK Advisory Board. (1990). Preparing Practitioners to Work with Infants, Toddlers and Their Families: Issues and Recommendations for Policymakers. (Also, *Issues and Recommendations for the Professions, Issues and Recommendations for Educators and Trainers, and Issues and Recommendations for Parents.*) Arlington, VA: **ZERO TO THREE**/National Center for Clinical Infant Programs.

Percentage of caregivers with infant development training:

Whitebook, M., Howes, C., & Phillips, D. (1989). Who Cares? Child Care Teachers and the Quality of Care in America. Oakland, CA: Child Care Employee Project.

States requiring training in child development:

Morgan, G. (1991). "National Child Care Policy: The Importance of Consumer Protection." Keynote Address at National Licensing Conference, San Francisco, CA.

States requiring specialized training for infant and toddler care:

Morgan, G. (1992). State of the States Report. Wheelock College: Center for Career Development in Early Childhood and Education. *(In press). Data from May 1991.*

States allowing exemptions for church and school-based child care centers:

Morgan, G. (1990). "How the States Administer Their Licensing Programs." National State of Child Care Regulation: 1990. Watertown, MA: Work/Family Directions.

Page 23

Children at the poverty level:

Johnson, C.M., Sum, A.M., & Weill, J.D. (1992). Vanishing Dreams: The Economic Plight of America's Young Families. Washington, DC: Children's Defense Fund & Northeastern University's Center for Labor Market Studies.

Department of Commerce, Bureau of the Census. (1990). "Money Income and Poverty Status in the United States, 1989." Current Population Reports. Washington, DC: Government Printing Office. (Series P-60, #168. 7).

Page 24

Refundable child tax credit:

National Commission on Children. (1991). Beyond Rhetoric A New American Agenda for Children and Families: Final Report of the National Commission on Children. Washington, DC: National Commission on Children, Chapter XXI.

Tax credits for children and selected country comparisons: (for additional information)

Kamerman, S. B., and Kahn, A. J. (Eds.). (1991). Child Care, Parental Leave, and the Under 3's: Policy Innovation in Europe. Westport, CT: Auburn House.

Adequate space in child care settings:

Lally, J.R., & Stewart, J. (1990). "Infant/Toddler Caregiving: A Guide to Setting Up Environments." The Program for Infant/Toddler Caregivers. Sacramento, CA: California Department of Education & Far West Laboratories.

The Program for Infant/Toddler Caregivers. (1992). "Together In Care: The Child Care Video Magazine." [*accompanies Video*] Sacramento, CA: California Department of Education and Far West Laboratories. *(Contains the recommendations of Louis Torelli.)*

Though more stringent in some respects, our recommendations are consistent with:

American Public Health Association (APHA) and American Academy of Pediatrics (AAP). (1992). Caring for Our Children: National Health and Safety Standards: Guidelines for Out of Home Child Care Programs. Washington, DC & Elk Grove, IL.

National Association for the Education of Young Children (NAEYC). (1991). Accreditation Criteria and Procedures of the National Academy of Early Childhood Programs. Washington, DC: NAEYC.

Heart Start: The Emotional Foundations of School Readiness was drafted by Eleanor Stokes Szanton, Peter L. Szanton, Jeree H. Pawl, Kathryn E. Barnard, Stanley I. Greenspan, J. Ronald Lally, and Bernice Weissbourd. Its Endnotes were compiled by Joan Melner.

Office support was provided by Simone Bielsker and Gail Shirar.

The paper's recommendations were developed and its text approved by the Committee on Public Policy/Public Education of **ZERO TO THREE**/National Center for Clinical Infant Programs (Bernice Weissbourd, Chair; T. Berry Brazelton; Irving B. Harris; Asa Grant Hilliard, III; Beverly Roberson Jackson; Sheila B. Kamerman; J. Ronald Lally; Bernard Levy; Peggy Daly Pizzo; Arnold J. Sameroff; Marilyn M. Segal; Rebecca Shahmoon Shanok; Lynn G. Straus; and Edward Zigler).

In addition, the drafters are grateful to Deane Argenta, Carol Berman, Emily Fenichel, Abbey Griffin, Samuel J. Meisels, and Judith Viorst, each of whom reviewed and helped shape the document at key stages in its development.

Five Vignettes:
How Services Can Change
The Lives of Infants, Toddlers and Their Families

Heart Start: The Emotional Foundations of School Readiness makes a number of recommendations that, implemented together, would make a profound difference in the readiness for school of our nation's children. To illustrate the ways in which high-quality, family-centered services can make a crucial difference to young families and ultimately to their children, we offer the following vignettes. The vignettes, while fictional, are based on the experiences of many of us in our work with families and providers of service in a range of circumstances. Emphasized in each vignette are the qualities of the relationships offered, whether to a young mother and father and their baby, to a teenage single parent, to a toddler entering child care, to a foster parent or to a new mother who is worried that something is wrong with her baby. The various kinds of expertise which a nurse, a doctor, an infant mental health expert or a day care provider possess are diverse, but they must all be informed by an awareness of the importance of the relationship of parent and child, and of professional (or para-professional) and parent and child.

The same awareness informs the recommendations that are the heart of "Heart Start."

Vignette #1:
The Community Health Nurse:
A baby "welcomed" and followed; a family supported

The way it shouldn't be:

At the very last minute Suzanne had given in and called her mother to see if she could come to the hospital and take her and little Danny home. Every time Greg came to the hospital they fought and then Greg stormed off. No job, no money—how could they manage? What a mess! She should have been more careful. This baby was going to really mess up her life. Now her mother was there with her nasty mouth saying, "I told you so. Better get in the wheel chair, Suz, it's the last free ride you and your little bundle of joy are going to get. You'll pay the piper now. "The nurse muttered something about "a fine boy" as she handed Danny to Suzanne but Suzanne felt so sick and angry she could barely hear her and she didn't reply. She just took him, held him and wished she could be anywhere else in the world. She wished Greg were here. She wished her mother would go away. She wished she were dead.

Unless they receive help, Suzanne, Greg and Danny all seem headed for conflict, unhappiness and failure. But policies such as those recommended under "Welcoming, assessing and tracking" and "Health care providers as colleagues of parents" can ensure that a professional can come to know them over time, and provide substantial help.

The way it should be:

Suzanne and Greg were sitting in facing chairs next to the hospital bed. Suzanne was holding Danny, just one-day-old. Greg was leaning forward, talking agitatedly, "That's the only place I could find. It's not so bad." Suzanne tried

to picture the three of them in a tiny room in a transient hotel. She felt scared and sick and angry. What did she even know about taking care of a baby? She stared at Danny. Oh God, if only he'd just go away. A woman walked in just then and introduced herself. "Hi, sorry to interrupt, but I wanted to get a chance to talk to you before tomorrow when you'll be leaving the hospital. My name is Jane Summers and I'm a nurse with the Health Department. I wanted to see if I could be of help to you." Greg sneered, "How about a job." Suzanne said, "Yeah, and how about an apartment?" Jane Summers asked, "You two and your baby are all on your own? "You got it," answered Greg. "Well," said Jane, "then we've got a lot of getting acquainted to do. I can really help you think about both of those things and about this little fellow as well.Who . am I talking to anyway?" "I'm Suzanne, this is Greg, and this is Danny". "It's nice to meet you all," said Jane Summers. "Your son looks like a very healthy boy. Who does he look like?" Simultaneously Greg and Suzanne both said, "Me" and then they both laughed. This seemed to free Greg up to move and he went and got another chair so that Jane Summers could sit down. They began to get acquainted.

Young parents need a relationship with someone who takes an interest in the medical and social well-being of all of the members of their family. The county health nurse can make home visits, observe and discuss their baby and babies in general with the parents, find resources and provide information. She can be sure the baby gets regular preventive health care and screening, since this family would qualify for Medicaid or maternal and child health services. She can enlarge their knowledge and understanding of their baby. And she can do this through a supportive relationship that tries to take account of all of this vulnerable family's many needs. And though she can't single handedly solve their housing and employment problems, she can connect them to information about job training and housing resources and help them think about the best way to make use of them.

Vignette #2:
The Talbots—a special baby

Joan Talbot closed the door of Dr. Gould's office with a certain sense of excitement. It had taken her a long time, a lot of courage and persistence to get here. She felt, finally, as though someone understood that Jonathan had a problem and that she had a problem with Jonathan. She also felt hope that she and Jonathan could find a way to really like each other—maybe even enjoy each other.

She had been worried about Jonathan since his birth. He came somewhat early and was low in birthweight. Even in the hospital he seemed to Joan to cry more than the other babies, working himself up into a red fury. She worried that something was wrong—that she was too old to be having this child even though,after two daughters, her husband so much wanted a "Jonathan Talbot, III." Joan's mother didn't seem to have enjoyed helping to care for Jonathan the first ten days at home, as she had Letty and Silvie. "Poor little thing," her mother had said over and over as together they had rocked him to try and soothe him. Her mother had seemed almost relieved to leave, just as Jon had seemed glad to escape to argue a case halfway across the country. And dear old Dr. Lord hadn't seen anything to worry about. "It's just colic. He'll grow

out of it." Month by month Jonathan was retreating further into his own world, looking away or squirming whenever Joan picked him up and often screaming when she held him. In addition his weight was not good. He seemed to fight growing, just as he fought everything else about being alive. She had found herself sometimes wishing they had stopped with two children; he was ruining everything. And now Sylvia was wetting her bed at night again and throwing temper tantrums. Joan didn't know whether she would ever get back to her own free lance art work. She felt she was losing her grip and becoming more furious with Jonathan everyday.

This situation is quite a common one. It is tragic for infants who experience discomfort and trauma over their first weeks and months of life. It is tragic for parents— even experienced parents with lots of resources, such as the Talbots—who feel inadequate and resentful. Finally, it is tragic for this child's future in school and beyond—one in which Jonathan may well be labeled learning disabled, hyperactive or autistic, as his situation, unchecked, grows worse.

Then one day in desperation she called a hotline for people with parenting problems. The person on the phone told her about Dr. Gould, a specialist with infants and young children who had sensory processing problems. Joan sought him out and she and Jonathan had been working with him for several weeks. Dr. Gould reassured her that she was right, that Jonathan did indeed have problems and that he was very easily over stimulated. Dr. Gould explained that the things any good ordinary mother like Joan would be inclined to do were things that didn't work at all well with Jonathan. Joan was now learning to react to Jonathan in ways that really helped him—to hold him in a particular way, for instance— and she was learning to accept her original resentment. Dr. Gould worked with her to invent ways to capture Jonathan's attention and get him to look at what she was doing, slowly and gently bringing him into more contact with the world.

As they rode down the elevator, Joan spoke to Jonathan in the quiet voice that Dr. Gould had suggested she use. She captured his gaze, and Jonathan began to smile. He looked away quickly, but Joan didn't try to force him to look at her. She understood he was resting. In a moment he looked back and smiled again. She returned his smile and said softly, "You and I are going to be good buddies, J. Talbot the III—really good buddies."

Resources such as Dr. Gould are rare at the moment. As recommended in "Providing special help for families with special problems," the federal and state governments, as well as foundations, should be funding the training, of people qualified to provide this kind of help.

Vignette #3:
Foster mothers need advice, too

The way it shouldn't be:

Mrs. Brown realized she couldn't bear it one more minute. It had seemed the right thing to do in response to the epidemic she read about in the papers. Those poor babies—exposed to drugs before they even had a chance to be in the world. With her experience she had been sure she could handle any baby. Little Rodney had been fine—the first drug-exposed

baby she had cared for—a mite more jittery than some but a little special attention and he settled in fine. She had seen no reason to hesitate to take another. But that was before she met Holly two months ago. Fifteen years of being a foster mother, and suddenly she felt helpless. She and her husband Jake had tried everything. Jake was tired of the screaming, and he made that very clear. So now things were very tense between them.

Just now, when Holly had started screaming and throwing everything in reach, Mrs. Brown jerked her up hard by her arm and all but threw her in her crib. Holly was still howling when Mrs. Brown shakily dialed the social services number. Without telling them what had happened she said Holly was disruptive and too difficult and they would need to arrange to pick her up as soon as possible. No, she didn't want to discuss it. Let her know when they could come and she'd have Holly's things ready. She hung up feeling like a failure; "But, at least knowing Holly is leaving, I won't hurt her. I've never hurt a child and I don't want to start now.... I wonder what will happen to her."

<u>The way it should be</u>:

Mrs. Brown was very moved by the stories in the papers about the babies exposed to crack, cocaine and other drugs. She had cared for a lot of babies in her fifteen years as a foster mother and she felt moved to help some of these children. On impulse, she called the placement worker and volunteered. Ms. Childres said she was delighted that Mrs. Brown had called and they would be happy to include her. They would want to help her with the special care such a child might need, and they had special training for that, she explained.

Mrs. Brown bristled a bit, saying she had handled some humdingers in her day and had never needed any special training. Mrs. Childres replied that it was because of that skill that she thought Mrs. Brown would be perfect, but there were things that might come up which experts on children exposed to drugs could help with. Such children didn't always respond like most kids—"Some do, but some don't. We have to be very selective about the homes that they go to and we want to prepare those who qualify in a general way and then meet regularly about the particular child who comes to your home." Mrs. Brown said that she was always interested in learning things and that it sounded as if it would be interesting and worthwhile. They discussed the schedule of training and other details such as the need for respite care if the child she cared for was particularly difficult. Mrs. Brown said she would discuss it all with her husband, and get back to Ms. Childres.

Prevention is always preferable to intervention. Frequently, preventive efforts keep damaging disruptions from occurring. Training foster parents and providing consultation regarding the children for whom they care protects both the foster parents and the child. Drug-exposed infants are a special case, but abused and neglected children and any children separated from their familiar surroundings and parents are in need of special care and understanding. Helping foster parents to better understand the needs of such children,and to learn more effective ways of responding to them are important aspects of successful child welfare efforts. As recommended in "Providing special help for

families with special problems," federal, state and private funding should support this kind of assistance.

Vignette #4:
A community health center: Treating more than a cold for a new American family

Supportive relationships can develop at a doctor's office or health center. Often a child is brought in because of a particular health problem, but the need for broader counseling is obvious. Recommendations relating to "Family resource programs" and "Child care and health providers as colleagues of parents" suggest how these needs could be met.

For the third time in as many visits to the Community Health Center where she had been treated for a very bad cold and cough, 2-year-old Ilana's screaming and kicking made it almost impossible for Dr. Randal to examine her. Mrs. Carrero, the mother of Ilana and 6-month-old Jose, seemed helpless in this situation, embarrassed by Ilana's behavior yet unable to change it. Feeling that the Carrero's needed more than her limited Spanish and brief experience in counseling parents could offer, Dr. Randal sought advice from Mrs. Valesquez, a bilingual mental health consultant attached to the center. At the Carrero's next visit, Dr. Randal introduced Mrs. Valesquez as someone who might be able to help them understand why clinic appointments were so difficult for Ilana.

Mrs. Valesquez learned that Ilana's behavior had been as difficult at home as in the clinic. She also discovered that the Carrero's had lived in almost a dozen different single rooms in the apartments of other new immigrants during the three years they had been in this country. Mr. Carrero worked long and irregular hours. In recent months he had spent several weeks at a time away from home working on construction projects.

Mrs. Valesquez found times when she could talk with Mr. and Mrs. Carrero, both in their room and at the health center. She set up weekly appointments. She helped them to think about what Ilana might have been feeling as the family changed living arrangements, her beloved father seemed to disappear from her life and her new baby brother preoccupied her mother. As the Carrero's began to take time to explain planned events, including clinic visits, to Ilana in advance, Ilana felt more in control of her world, including her own behavior. Proud of their daughter's intelligence, the Carrero's started to include their "big girl" in their discussions of the apartment they hoped to find for their family alone. Over time, the Carrero's explored with Mrs. Valesquez aspects of their histories that might be affecting relationships in the entire family. They also discussed more honestly their feelings about their immigration and the loss of so many important people. As their trust in Mrs. Valesquez grew, they were both more willing to discuss other possibilities available—such as English classes and job training.

After several months, the Carrero's felt that Ilana was far more cooperative and happy. Both parents felt more optimistic. They and Mrs. Valesquez agreed that they didn't need to continue to meet, though they always looked her up when they came to the clinic. No longer a place of embarrassment and discomfort, the

clinic had become a safe haven. The same is beginning to be true of their adopted home.

Vignette #5:
Child care: A secure place and a special relationship

The way it shouldn't be:

Tim stood just inside the entrance to the big playroom. He was sturdy for 2-1/2 but short. The noise was jarring and he looked around for the woman his mother talked to when they came in. She had said to his mother, "He'll be fine—I'll get him started" and she had taken his hand. But now, just as fast, she was gone. It scared him as much as the other time. This was not a good place to be. He wanted his mother and he wanted to go home. A boy running past bumped him hard and Tim nearly fell, but he caught himself and made his way to the corner of the room. He still couldn't see that big person or the other one—just lots and lots of small kids. He sat down and fingered some colored blocks on the floor. A big boy came and grabbed one and stepped on his hand. Tim yelped and cried and looked around. He held his hurt hand in the other and the tears ran down his cheeks. No one saw.

2 weeks later:

Tim stood just inside the entrance to the big playroom. It was very noisy. A boy ran past him and bumped him. Tim lunged for him and pushed him down. The boy cried, and Tim walked over to the blocks. He picked some up, and a bigger boy came and grabbed them. Tim gave them up quickly and then turned and saw a smaller boy who had some. He pulled them away from him. The boy cried. Tim looked at the blocks. He couldn't remember what he'd been going to do with them, so he threw them down. They made a very satisfying sound. He picked up several other toys nearby and threw them. Suddenly one of the women was there yelling at him and holding his arm very hard. She was saying lots of things to him and now she said, "time out" and scrunched him on a stool. He tried to get up, but she wouldn't let him. She waved a finger in his face. He thought about biting it. She went away. He didn't like this place. He wanted his mother. He wanted to go home.

What Tim is learning in this child "care" center, is almost everything we would not want him to. He is important to no one here and must fend for himself, as must others. For some it's like home—for others it's newly terrible. For all it is a potentially damaging experience. Clear policies which support quality child care can go far to ensure that very young children are treated in ways that teach them to cooperate, to care for others and to learn.

The way it should be:

Tim and his mother had visited the center twice in the last week. They had spent time with Mindy who told them she would be Tim's primary caregiver. Both Tim and his mother felt comfortable with Mindy. She was interested in them, wanted to talk regularly about Tim's progress and seemed to understand how Tim's mother felt about leaving Tim to go to work. To Tim today felt much the same, but his mother knew she was going to leave him for several hours and had told him so. Mindy met them at the door, squatted down to speak to Tim who

smiled shyly, remembering her, and then walked with mother and child to the small rocking horse that Tim had so enjoyed the last time. A small boy rushed by and bumped Tim quite hard. Mindy caught the little boy and talked quietly to him—introduced him to Tim and sent him on his way. Tim got on the horse and Mindy sat nearby where a somewhat bigger girl was building with blocks and a boy was working with large puzzle pieces. Mindy attended to all of them in turn as they wanted her attention or help. These were her three and she always kept a special eye on them. When it was time for her to go, Tim's mother reminded him she was leaving today. He looked surprised and climbed off the horse. Mindy picked him up and said, "Let's go to the door and say good-bye to your mother." Tim wanted to go with his mother. But his mother really seemed to be going to leave him, so he clung closer to Mindy who cuddled him and talked quietly. Then his mother was gone. It was like everyone in the world was holding their breath at the same time but Mindy held him and patted him and talked quietly and then everyone began to breathe again. He could see the toys and children, but mostly he liked hearing Mindy's voice. Ten minutes later Tim was on his horse. He wasn't as wholly confident as twenty minutes before; but he could still ride, and Mindy was close by and always noticed when he looked at her.

2 weeks later:

After his mother kissed him, Tim waved good-bye and then he said, "Hi" again to Mindy who ruffled his hair. Tim made a line for the block area but when he got there Wong Chen had corralled all of the red ones Tim wanted. Tim squatted down and watched Wong Chen. In a minute, Mindy came over and squatted down too and they both watched him. Then Mindy said, "Tim is very interested in those blocks too, Wong Chen, would you let him have a few?" Wong Chen looked at the floor and then he looked up and frowned at Mindy and then at Tim. Mindy said, "OK, Wong Chen, if you want them right now, Tim can use them later." And then to Tim, "Maybe you'd like bristle blocks? I don't think anyone has those." As Tim started to walk away, Wong Chen handed him one red block and Mindy said, "Thank you Wong Chen, we'll use that. Suddenly Tim decided to ride his horse instead, but first he took the block from Mindy and fed his horse. "Spotty is hungry," said Tim, "breakfast food." Molly, 3-1/2, stuck a clothes pin toward Spotty's mouth. "He's very hungry," said Molly. "All the animals are hungry." Tim said, "they're all very, very hungry." Wong Chen, who had been watching, got the basket, put all the blocks in it and brought it to Tim and Molly. They all fed all the animals - every one they could find. Some of the other six children joined them. Molly announced that it was time for all the animals to sleep. Tim and Wong Chen, Molly and one of the other children got cloth squares and covered them. Wong Chen woke up Spotty and climbed up to ride him. Tim started building with the red blocks. He would build a big car—a red car like his mother's car. His mother was working. She would come later. "Mother comes later," Tim said. Mindy heard him. "She will, Tim," said Mindy. "She'll come after lunch, and after your nap and after stories." "Lunch and

stories," said Tim and then he said, "See my car? I made it myself."

Tim is learning a lot in this center, mostly very good things. He feels important. He feels heard and understood. He feels protected, and his primary caregiver helps him negotiate the difficult things with other children. He is learning to cooperate and to pay attention to what other children need and want. There is enough space, there are enough providers, just enough children and abundant affection for everyone.

Far too often in our nation child care is "the way it shouldn't be." *Heart Start's* recommendations about child care ratios and group size, continuity of care, and the training and compensation of child care providers all can help to make it "the way it should be." ■

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